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COLLEGE OF PHARMACY

September 20, 2010

Academic Program Review Council  
University Academic Senate  
Ferris State University  
Big Rapids, MI

Council Members:

We are pleased to provide you with the 2010 Academic Program Review for the College of Pharmacy's Doctor of Pharmacy program. This report is prepared as an accompanying document to the College's 2010 Self-Study. In that thorough review of the program, including a self-study and on-site evaluation, the program was compared to 30 national standards for accreditation developed by the Accreditation Council for Pharmaceutical Education (ACPE). In the final self-study report, 24 standards were met based on the faculty's review and six standards were classified as "partially meets". In their initial, preliminary report, at the conclusion of the site visit, the on-site ACPE evaluation team felt that 26 standards were either met or were met with monitoring (a classification available upon the on-site visit) and four standards were partially met. In light of the rigorous nature of the standards, this is validation of the College's efforts to provide students with a quality program. Further, the identification of four areas requiring improvement provides the College with clear direction for immediate action.

The Doctor of Pharmacy program has undergone several changes over the past six years including development of a new Mission Statement for the College and both departments, implementation of a new curriculum, revision of its admission process, appointment of several faculty members, modification of its administrative structure and renovation of instructional resources including a cognitive skills laboratory and auditorium. With those milestones over the past review cycle, we feel the program is well positioned to educate pharmacists now and into the future. We are concerned that the uncertain fiscal environment of the State has and may continue to negatively affect College operations and limit future opportunities. The dynamic nature of academic pharmacy, with significant program growth and creation of a competitive environment of both student and faculty recruitment, must be recognized by the University as allocation of resources is considered.

The Doctor of Pharmacy program continues to be one of the University's most distinctive and recognizable programs. "Successful careers and lifelong learning," tenants taken from the University's mission statement, apply directly to the Doctor of Pharmacy program and the mission of the College. Further, the College's principal activities include professional graduate education and continuing education for practitioners. With a preponderance of the State's practicing community pharmacists graduates of the program, the College is recognized as the leading provider of pharmacists in the state and throughout the Midwest. Despite a very prescriptive accreditation process leading to similarity of curricula across the country, the College's Doctor of Pharmacy program is recognized for the development of a strong foundation in community and hospital practice abilities in its graduates. In 2008, among the College's adjunct faculty when asked to evaluate the

knowledge, skills and abilities of the students they precept, 87.9% strongly agreed or agreed (SA/A) with the statement “the Doctor of Pharmacy program prepares students to manage the system of medication use.” 84.5% of preceptors SA/A with the statement “the Doctor of Pharmacy program prepares students to effectively manage a patient-centered pharmacy practice.” 96.6% of preceptors SA/A with the statement “the Doctor of Pharmacy program prepares students to maintain professional competence.”

The value of the pharmacist in today’s health care system cannot be overstated. As control of acute and chronic disease increasingly relies on management with an expanding array of medications, the pharmacist has become an important consultant for the physician, the caregiver and the patient. Labor market demand for pharmacists appears to be ahead of supply in the Great Lakes Region (See Section 1. Part C). This is seen as a positive indicator in light of the significant number of new pharmacy programs developed in the Great Lakes region and expanded enrollments in existing programs. With health care reform bringing with it increased prescription coverage and the continued aging of the population, demand for pharmacists is expected to continue at its present level or increase in the coming years. The pace of the nation’s and state’s economic recovery will also play a role in the demand for pharmacists.

Since the last review, the College’s faculty has grown to a total of 44.6 FTE, with an additional 5.4 FTE in supplemental faculty. All tenure-track or tenured faculty are pharmacists by training or have trained in a College of Pharmacy for their terminal degree. This provides students with an enhanced perspective in the profession throughout the program as all faculty possess an understanding of the pharmacy profession. The engagement of faculty in teaching, service and learning is outlined in this report as an appendix containing all faculty accomplishments and recognitions over the past several years. Quantitative factors are addressed in the ACPE accreditation standards, with the student:faculty ratio (SFR) a critical measure in the assessment of a program. As reported in the 2010 Self-Study, the overall SFR for the program stands at 12.1 which is at the limit of the acceptable range. Efforts within the College will continue to ensure that appropriate levels of faculty support, as well as adjunct faculty support, are maintained.

The College’s three instructional facilities (Big Rapids Campus, Grand Rapids and Kalamazoo) are adequate for programming needs. The anticipated relocation of the off-campus instructional sites to a single location on Grand Rapid’s “medical mile” will bring with it an opportunity for increased visibility and the development of linkages with the Van Andel Research Institute, Michigan State University College of Human Medicine and Grand Valley State University. Inter-professional curricular elements are recognized as an essential element of Doctor of Pharmacy curricula.

As you will see from this report and the accompanying Self-study materials, the College’s efforts in the past six years have been notable and comprehensive of all aspects of programming. The College of Pharmacy Executive Committee agrees with the data and findings of this report and looks forward to further discussion of its contents with the APRC.

Sincerely,

Ian Mathison, Ph. D.  
Dean

Stephen Durst, Pharm.D.  
Associate Dean

Gregory Wellman, Ph.D.  
Assistant Dean,  
Student Affairs and Assessment

Adnan Dakkuri, Ph.D.  
Professor/Department Head,  
Pharmaceutical Sciences

Michael Bouthillier, Pharm.D.  
Associate Professor/Department Head  
Pharmacy Practice

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## Abbreviations

AACP	American Association of Colleges of Pharmacy
ABO	Ability Based Outcomes
AC	Assessment Committee
ACPE	Accreditation Council for Pharmaceutical Education
ADSAA	Assistant Dean of Student Affairs and Assessment
APhA	American Pharmacists Association
APPE	Advanced Pharmacy Practice Experiences
CAS	College of Arts and Sciences
CET	Candidate Evaluation Team
CRTF	Curricular Revision Task Force
DECO	Director of External Clinical Operations
EAB	Experiential Advisory Board
EC	Experiential Coordinator
FCTL	Faculty Center for Teaching and Learning
FFA	Ferris Faculty Association
FLITE	Ferris Library for Information, Technology and Education
FSU	Ferris State University
GRMEP	Grand Rapids Medical Education Partners
GRMERC	Grand Rapids Medical Education and Research Center
HLC	Higher Learning Commission
ILL	Inter-library Loan
IPPE	Introductory Pharmacy Practice Experiences
ISM	Independent Study Modules
KCMS	Kalamazoo Center for Medical Studies
MPA	Michigan Pharmacists Association
MPJE	Multi-state Pharmacy Jurisprudence Examination
MSU-CHM	Michigan State University Collage of Human Medicine
NAPLEX	North American Pharmacy Licensure Examination
NCPA	National Community Pharmacists Association
SA/A	Strongly Agree/Agree
SAI	Student Assessment of Instruction
SDL	Student Directed Learning
SPARC	Strategic Planning and Resources Council
UCC	University Curriculum Committee
VPAA	Vice President for Academic Affairs

For all appendices refer to Volume 2 College of Pharmacy Self Study for this report.

## Academic Program Review Process

As a requirement for accreditation, the College of Pharmacy prepared a thorough self-study and submitted it to the Accreditation Council on Pharmaceutical Education in August, 2010. In preparing this report, much of the information has been adapted from the ACPE Self-Study. In addition, the College's Accreditation Committee has been assisted by the Self-Study Steering Committee in the report development.

ACPE re-accreditation is an extensive process, requiring the College to self-evaluate all aspects of its operations based on 30 standards. This process requires extensive data gathering including annual surveys of graduates, with every-other or every-third year survey of faculty, preceptors and alumni. The College's "2010 College of Pharmacy Self-Study" Volume 1, 2 and AACP Survey Results are provided as a supplement to the report. A summary of the Self-Study process is presented below.

In preparation for the 2010-2011 accreditation process, members of the College's Executive Committee convened in March, 2009, to outline the organizational structure for the accreditation process, develop plans for the kick-off meeting and identify chairs for each section of Standards 2007. Additional individuals that could provide input to the process were identified and advised of the upcoming process. The University's Administration was notified that the College would be preparing a Self-Study report in preparation for an on-site visit in 2010-2011. Membership in the Self-Study Steering Committee was determined by the standing Accreditation Committee to include: all members of the Accreditation Committee, chairs of each of the accreditation standards sections, two Alumni Board representatives, a P2 student, Co-Chairs consisting of the Associate Dean and Department Chairs (upon appointment), and the Pharmaceutical Sciences Department Secretary for clerical support. Steering Committee and Section membership is outlined below:

### Co-Chairs:

Adnan Dakkuri, B.S., Ph.D, Department Chair, Pharmaceutical Sciences  
Michael Bouthillier, B.S., Pharm.D., Department Chair, Pharmacy Practice  
Stephen Durst, B.S., Pharm.D., Associate Dean

### Accreditation Committee:

Richard Hult, B.S., Ph.D., Pharmaceutical Sciences  
Robert Krueger, B.S., Ph.D., Pharmaceutical Sciences  
Claire Saadeh, B.S., Pharm.D., Pharmacy Practice  
Curtis Smith, B.S., Pharm.D., Pharmacy Practice

### Section Chairs and Members:

Mission, Planning and Evaluation – Adnan Dakkuri, B.S, Ph.D.  
-M. Klepser, R. Krueger, S. Lee, D. Van Loo  
Organization and Administration – Cambria DeHoag, Pharm.D.  
-R. Baran, J. Jameson, T. Mersfelder, G. Potter  
Curriculum – Elsie Lovsted, B.S, Ph.D.  
-J. Bakus, J. Covyoeu, C. Feucht, R. Hult, M. Nienhuis, C. Smith, C. Straley,  
P. Thill  
Students – Greg Wellman, B.S, M.S., Ph.D.  
-R. Koski, J. Hagerman, M, Lyons, L. Ngoh, K. Rowley, M. Seiferlein,

H. VandenBussche  
Faculty and Staff – Claire Saadeh, B.S., Pharm.D.  
-T. Bailey, T. Boncher, M. de Voest, K. Hanson, S. Raguckas, M. Ross

Facilities – Kim Hancock, B.S, Ph.D.  
-J. Bates, A. Bernknopf, M. Bouthillier, M. McMullen, J. Morse, K. Schulz

Student Representative:  
Ryan Greenley, P3

Alumni Board Representatives:  
Rick W. Dettloff, B.S., Pharm.D.  
Andrew Young, B.S.

Clerical Support:  
Melissa Saunders

The Self-Study “Kick-Off” was held on June 16, 2009; Dr. George Spratto, Ph.D., ACPE Board of Directors, provided an overview of Standards 2007 and outlined the Self-Study process and expectations to the faculty. During the session, section chairs convened their committees and made initial assignments, organized the section, identified sources of information and metrics, and provided a brief report to the entire faculty outlining their plans for the section. Section chairs were then responsible for guiding the development of the response to each standard during the remainder of the Summer and Fall semester. Monthly meetings of the Steering Committee were held through the Fall, with frequency increasing to bi-weekly in the Winter. A rough draft was assembled in early May, 2010, and each faculty member was assigned to review two standards prior to a College-wide meeting on May 17<sup>th</sup> in which each standard was discussed with the faculty review presented. A subsequent draft was distributed to all faculty members for a second full-faculty meeting on June 21. Section Chairs reviewed each standard in the section, discussing the checklist and the final evaluation. Following this review, an electronic ballot was mailed to all faculty members, requesting their evaluation of each standard. Voting results were incorporated into the final Self-Study document. Final versions of each section were prepared and forwarded to editors for review in June and July.

Information sessions were held with each class, P1, P2 and P3 to acquaint them with the accreditation process and the upcoming site visit. A list of talking points were prepared for the College’s adjunct faculty and presented at their Annual Conference in June.

Throughout the process, development of the Self-Study relied on the input of faculty members and selected stakeholders, incorporated data obtained from various assessment metrics including the AACP/ACPE Surveys and internal assessment data and focused on the checklists included in each Standard. Most importantly, the process reflects a collective effort of the faculty, staff and administration as well as key college stakeholders.

## **History of FSU's Pharmacy Program**

Pharmacy has had a presence on the campus of Ferris State University since the first pharmacy student enrolled for the purpose of preparing for the Michigan state licensing examination in 1894. Over the years the program has transitioned from a course taught by Mr. Ferris, to a four-year then five-year Bachelor of Science degree and most recently to the Doctor of Pharmacy (Pharm.D.) curriculum in 2000. The doctor of pharmacy program, now with a total enrollment of approximately 600 students, has significant impact on the University, with approximately 10% of all students either in the College or in pre-pharmacy studies in the College of Arts and Sciences. With over 110 years of experience in pharmacy education, the College is recognized regionally, nationally and internationally for the quality of its programming and the ability of its graduates. Within the State, over half of all practicing pharmacists are graduates of the College; nationally, graduates hold key roles in all areas of pharmacy practice including education, corporate pharmacy, institutional hospital practice, pharmaceutical industry and successful independent practice. Frequently, recent graduates score well above state and national averages for the North American Pharmacy Licensure Examination (NAPLEX) and approximately 15% of graduates continue their education in post-graduate residency programs or graduate studies.

### **Overview of Pharmacy Program**

In the fall of 2000 the first all Doctor of Pharmacy class was admitted to the College of Pharmacy. The conversion from the B.S. in Pharmacy to the entry-level Doctor of Pharmacy degree resulted in expansion of the program from three years of undergraduate education to four years of professional-graduate education in 2000. The curriculum introduced in 2000 was thoroughly reviewed with a revised curriculum introduced in 2009. Curricular revision was initiated in 2007 to ensure complete compliance with the Accreditation Council on Pharmaceutical Education's Standards 2007. The revised curriculum continues the split-campus model, with students in professional year 1 and 2 (P1 and P2) located on the University's main campus. Completion of P2 brings with it a reassignment of all students to one of the College's two off-campus instructional sites located in Grand Rapids and Kalamazoo for completion of their third professional year (P3). The fourth professional year (P4) consists of nine one-month experiential clerkships supported by over 30 pharmacy practice faculty members and over 300 adjunct faculty members. Students are assigned to carefully selected practice sites throughout both peninsulas for clinical experiences in general medicine (inpatient), ambulatory medicine, community practice and a wide range of elective "specialty" areas.

The 2009 curricular revision emphasizes integration of course content with four "hybrid" courses developed – Drug Delivery, combining elements of pharmaceuticals and pharmacokinetics; Infectious Disease, combining elements of microbiology, chemotherapeutics and infectious disease pharmacotherapeutics; and Drug Action, which combines traditional content from medicinal chemistry and pharmacology. Experiential education is earlier and expanded in the 2009 Curriculum with an Introductory Pharmacy Practice Experience (IPPE) in the summer following both P1 and P2. Additionally, a ninth required clerkship is added in Institutional Practice (previously an elective). Extensive use of the summers following P1 and P2 forced the elimination of the accelerated-track option that was available in the 2000 Curriculum. In addition to the summer IPPE's, course remediation is offered in the Summer semester for students experiencing academic difficulty in either P1 or P2. This wide variety of experiential sites promotes the ability of the students to work with diverse colleagues and patients. An international exchange option continues for selected students with two foreign universities. Eight-week clerkships conducted at the University of Bath in



England or Angers University in France provide students with a total immersion in foreign practice and socialized medicine.

A joint Doctor of Pharmacy/M.B.A. option exists for students interested in strengthening the business foundation that exists in the Pharm.D. Curriculum. All requirements for the Doctor of Pharmacy remain unchanged, with students given advance standing in the M.B.A. program as a result of the business based courses in the curriculum. In addition, two P4 clerkships that emphasize business-based concepts are selected by students in the joint program. The clerkships are intended to establish a foundation for the M.B.A. capstone project, usually completed following awarding of the Doctor of Pharmacy degree. Because of the rigor of the Doctor of Pharmacy curriculum, this option is seldom selected, although student interest in increasing based on numbers currently in the program. The College of Pharmacy working with the College of Business has developed selection criteria for the joint degree program which require the potential candidate to demonstrate above average capability in Doctor of Pharmacy coursework. Over the past two years, the College, with support from the Vice President of Academic Affairs Office, has undertaken an effort to increase the use of active learning techniques throughout the curriculum. This initiative coincided with the introduction of ACPE's Standards 2007 which call for a wide-range of learning strategies including active learning to be utilized. Initially focused on a component of active learning called "accelerated learning," faculty worked closely with an instructional designer for approximately 18-months. Components of accelerated learning were then incorporated into a broader "active learning" approach which has been advocated by the American Association of Colleges of Pharmacy (AACCP) with several faculty members attending a recent AACCP institute (May, 2010) devoted to incorporation of active learning techniques in the curriculum

## Section 1. Program Overview

### A. Program Goals

In 2007 the College formed a standing committee, the Accreditation Committee (AC), which was responsible for initiation of all accreditation-related reports and additionally, for developing recommendations regarding the existing *College Mission Statement* which was adopted in 2004. This effort coincided with the campus-wide efforts to develop a new *Mission, Vision and Values Statement* as outlined above. As iterations of the University document became available, various revisions to the *College Mission Statement* were proposed. With the completion of the *University Mission, Vision and Values* document in 2008, the AC endeavored to complete the revision process in the 2008-2009 Academic year. The committee reviewed a number of mission statements of different formats from outside the University, primarily from other schools/colleges of pharmacy. From that review, a draft document was developed and presented to the faculty in December 2008. Significant input was gathered resulting in the development of a final draft that was circulated to the entire faculty for an “e-vote” in March 2009 culminating in the approval of the *College Mission Statement* (see Appendix 1.1). Throughout the process, committee discussions leading to the development of each draft carefully considered the College’s strengths and those areas that were felt to be critical to the College’s future. As the *College Mission Statement* was developed with careful consideration of the *University Mission, Vision and Values Statement*, there is considerable alignment between the two documents and several common themes. Key elements of the *College Mission Statement* are compared with elements from the *University Mission, Vision and Values Statement* and presented in the table below.

Mission Statement Alignment

<i>College of Pharmacy</i>	<i>University</i>
The College of Pharmacy fosters the development of its students, faculty and pharmacists into practitioners who positively influence the health outcomes of the peoples of Michigan, the Great Lakes region, the nation and the global community.	Ferris State University prepares students for successful careers, responsible citizenship, and lifelong learning. Through its many partnerships and its career-oriented, broad-based education, Ferris serves our rapidly changing global economy and society.
“...highest quality pharmacy professional education to student and practitioners.”	“Excellence: Committed to innovation and creativity, Ferris strives to produce the highest quality outcomes in all its endeavors.”
“...patient-centered care by pharmacists that are committed to the safe and appropriate use of medication.”	“...The recognized leader in integrative education, where theory meets practice throughout the curriculum...”
“Developing and maintaining relationships with alumni, professional associations and the health care industry...”	“Collaboration: Ferris contributes to the advancement of society by building partnerships with students, alumni, business and industry, government bodies...”
“...development of each faculty member to meet the pedagogical, scholarly and service demands of a dynamic curriculum and profession”	“A stimulating, student-centered academic environment that fosters life-long engagement, leadership, citizenship, and continuing intellectual development.”
“...creation of a professional community that embodies the principles of ethics, fairness, honesty, civility and respect for peoples’ diversity of ideas, beliefs and cultures.”	“Diversity: By providing a campus which is supportive, safe, and welcoming, Ferris embraces a diversity of ideas, beliefs, and cultures. “Ethical Community: Ferris recognizes the inherent dignity of each member of the University community and treats everyone with respect.”

Emphasis on teaching at the College is obvious in the *Mission Statement* with reference to “... the development of its students, faculty and pharmacists who positively influence the health outcomes of the peoples....” Support for this overarching statement is contained in several

statements including: “provision of the highest quality pharmacy professional education,” “delivery of patient-centered care by pharmacists committed to the safe and appropriate use of medications,” and “the development of each faculty member to meet the pedagogical, scholarly and service demands of a dynamic curriculum and profession.” Although not directly stated, expansion of the College’s assessment program is implicit in the provision of the “highest quality pharmacy professional education....”

The *College Mission Statement* is supported by the *Pharmaceutical Sciences and Pharmacy Practice Departments’ Mission Statements* (see Appendix 1.2 and 1.3). These documents also highlight the College’s teaching emphasis and complement one another. Key concepts from the two documents include:

- expertise in the delivery of the basic scientific concepts that form the foundation of the profession
- optimization of medication therapy and the promotion of wellness
- acquisition of critical thinking skills
- innovational pharmacy practice education, patient-centered care, service and scholarly activity
- use of validated pedagogical techniques
- creation of progressive practice models
- advancement of faculty through strong mentorship and educational endeavors
- engagement of students in an interdisciplinary approach to patient-centered pharmacotherapy and public health

With the development of mission, vision and value statements within the last 2-3 years for the University, the College and the two academic departments, a consistent foundation that demonstrates commitment to quality education and practice has been established.

## **B. Program Visibility and Distinctiveness**

Over the past several years, the College of Pharmacy has engaged in an aggressive plan to address recommendations outlined in the 2004 ACPE Evaluation Team Report and to move the College and curriculum forward to meet stakeholders’ existing expectations anticipating the future needs of the evolving health care system. In addition, in an environment of ever expanding Doctor of Pharmacy programs, the College has constantly evaluated its curriculum and operation to provide students with an excellent entry into the pharmacy profession. The area highlighted below represents progress and changes since the last academic program review.

During the most recent review cycle, the State has faced a significant fiscal challenge directly affecting the University and the College. Until 2009 College budgeting remained constant or modestly increased annually. To meet a reduction in the College budget in 2009, the Assistant Dean/Department Head, Pharmaceutical Sciences, position was eliminated. This decision was carefully considered in light of the vacancy that had existed for over a year. Appointment of two Department Chairs during the 2009-2010 academic year and now formalized in 2010 has mitigated the loss of this administrative position. Further, additional responsibilities have been added to two clerical positions in the College to assist with admissions and accreditation issues. This has provided added resources to assist the Assistant Dean of Student Affairs and Assessment. Also in 2009, a salary equity adjustment for the College’s faculty, to correct what had become a significant gap between national data and the College salary scale, was implemented. Funding for the adjustment

was provided jointly by the Vice President for Academic Affairs and through a reallocation of funding from the College's supplemental faculty budget.

Earlier this year, the College was requested to develop a budget reflecting an overall reduction of 2% in FY 2011. As a result of previous reductions in the supplemental faculty budget and funding for open positions that had fallen below the identified salary, the College was able to maintain its existing total budget, with a reduction in supplies and expenses reallocated to the supplemental faculty budget. This internal reallocation will ensure adequate funding for supplemental faculty support of didactic and experiential instructional needs. At present, the FY 2011 budget is adequate for existing operations.

The relocation of much of Michigan State University's College of Human Medicine (MSU-CHM) to Grand Rapids and expansion of the Van Andel Research Institute has created a center for healthcare education in Grand Rapids. The University, aware of the growth of medical education and the important role of inter-professional education in the pharmacy curriculum, responded to an invitation in 2008 to begin discussions with MSU-CHM, investigating the potential of co-location in the proposed facility. Although those discussions were ultimately unsuccessful, the University has identified an alternative site, with many advantages over the MSU-CHM site and is pursuing purchase or lease of the facility, allowing for the merger of the two off-campus instructional sites to a single location. Plans will be finalized in late summer, 2010, with the expected completion date of 2011. This commitment of support is an indication of the University's recognition of the College of Pharmacy and its need for appropriate off-campus facilities.

Student comfort and quality of instructional facilities on-campus have been addressed, resulting in a complete renovation of the College's instructional auditorium, development of a clinical skills laboratory and plans for construction of a sterile parenteral laboratory. With the renovation of the pharmacy auditorium, faculty from distant sites will be able to participate in on-campus courses through distance learning. Individual student space and comfort in the auditorium is increased as the seating capacity has been reduced substantially while total floor space remains the same. A cognitive skills lab was developed from an existing pharmacology lab and funding for a simulation mannequin has been requested for this year. The proposed simulation in the P2 lab would prepare students for further simulation in P3; the College currently participates with Grand Valley State University's College for Health Sciences in the delivery of a P3 elective course that includes inter-professional training in a simulation laboratory with several mannequins.

The revision of the College's Doctor of Pharmacy curriculum is the most comprehensive and evidence-based activity the College has undertaken in the recent past. Forming a Curricular Revision Task Force (CRTF) in 2007, the Dean requested that a thorough revision of the existing curriculum be considered, while maintaining the existing "2 + 4" curricular model and approximate credit allocations. In addition, the curriculum was to comply with the newly adopted Standards 2007 and address any remaining issues from the 2004 accreditation process. The resulting revision process focused on three principal areas: admission requirements (pre-pharmacy requirements), curricular integration and experiential education.

Admission requirements were updated to establish a foundation for the professional curriculum that would prepare students for P1 coursework. Most significantly, the two-semester Anatomy and Physiology sequence was moved into pre-pharmacy to allow for addition of a two-semester Pathophysiology course in the professional curriculum. A formal pathophysiology course was not included in the existing curriculum and students' understanding of disease processes was seen as a limiting factor in achieving the desired outcomes in the P3 Pharmacotherapeutics course sequence. The admission requirement of statistics/biostatistics was deleted, feeling that the material could best be addressed in the professional curriculum with greater consistency. These changes

were posted on the College Web site and all two- and four-year programs in the State were notified of the revised requirements to allow students to make the necessary changes in their preparation.

Within the professional curriculum, significant changes were implemented. Course material related to infectious diseases was integrated into the P2 “Infectious Diseases” courses, team-taught with faculty from the Biology Department, Pharmaceutical Sciences and Pharmacy Practice. The two-course sequence will provide students with a more comprehensive approach to pathogens, pathology, anti-microbial agents and infectious disease therapy in an integrated manner. Medicinal chemistry and pharmacology were integrated into the single course, “Drug Action” which will be team taught. Through this integration, duplication that was seen between the two separate courses will be eliminated and it is anticipated that students will gain a greater understanding of the relationship of the two disciplines and will be better prepared for capstone courses in the third and fourth professional years.

Experiential components were evaluated for content, outcomes and placement within the existing curriculum with experiential components moved earlier in the curriculum. The Introductory Pharmacy Practice Experiences (IPPEs) are composed of a variety of activities; the community-based IPPE is now in the summer, immediately following P1 and the health-system IPPE follows P2. Longitudinal IPPEs are introduced in P2 and continue in P3 with a team of students assigned to monitor an ambulatory patient in the community. The IPPEs following P1 and P2 are each supported by a revised course manual and the longitudinal IPPEs have outcomes clearly identified for the students. The Advanced Pharmacy Practice Experiences (APPEs) include a required health-system clerkship; this increases the P4 year from eight to nine months in length. To support this enhanced experiential coursework, the College has expanded its adjunct faculty and practice site pool while continuing to recruit for open faculty positions within the Pharmacy Practice Department. Contractual arrangements with several health systems in the State have provided for a consistent base of clinicians, complementing the Pharmacy Practice Department faculty, to precept the required clerkships in both the 2000 and 2009 curricula. These contractual arrangements are reviewed annually specifying the number of students assigned and scheduling very similar to that of faculty members. Elective clerkships have been assigned to other practice sites that are arranged based on student demand and preceptor availability. Through this combination of faculty, contractual sites and conventional adjunct sites, students have been placed in APPEs without delays in graduation and with consideration of their preferences.

Students: The appointment of the Practicum Director, the Director of External Clinical Operations (DECO) and the formation of the Experiential Team (ET) has increased the level of support and coordination for experiential operations in the College. Notably, the DECO has developed a “Clinical Passport” system that identifies all required elements for student placement in affiliated sites, and tracks completion of each requirement. This has substantially improved ease of student placements and provided a level of assurance to affiliated sites that students meet all requirements upon arrival. An additional responsibility of the DECO position has been codification of all processes within the experiential program and in student volunteer activities to ensure compliance with university policies. The Practicum Director is currently a temporary position and will be made permanent prior to the start of the 2010-2011 academic year. This position has led the development of the IPPE program in the new curriculum, while coordinating activities within the existing program. In addition, the ET includes two community practice faculty members and an adjunct faculty member. In contrast to 2004, there is an increased level of support for the curriculum’s experiential programming directly resulting from the added faculty resources now comprising the ET.

Operation of the off-campus instructional site model has been refined through updating of technology and increased efforts to improve communications throughout the College system. The

delivery of course work through distance learning has become much more reliable with an upgrade in 2008 and a redoubling of technical support, including training of students to support the operation. The Director of Off-campus Student Affairs has coordinated implementation of several communication tools and student committees to improve communications. This includes a Student Advisory Board (SAB) that meets regularly at each site to discuss student concerns and to develop solutions and an advisor's council composed of faculty advisors of student professional organizations that meets regularly to discuss projects in the Big Rapids, Grand Rapids and Kalamazoo communities. Pharmacy 4-1-1 is a "course" in Blackboard that is specifically used for dissemination of information. Refinements in organization of the course are underway to increase the utility to students. There has been a notable improvement in communications with students through this combination of efforts.

Programmatic and curricular assessment has advanced exponentially since 2004 with the most significant advances in the last year with the appointment of the Assistant Dean for Student Affairs and Assessment (ADSAA). The University's decision to use the TracDat<sup>®</sup> platform for all University assessment activities has provided an organized system for assessing the achievement of curriculum ability-based outcomes (ABOs) that serve as the foundation for the 2009 Curriculum. Results of the AACP/ACPE Assessment Surveys have been entered into TracDat<sup>®</sup>, providing an organized approach to programmatic assessment. A student assessment portfolio was implemented with the Fall, 2009 entering class, which includes reflective journals, student self-assessment of ABOs and course content evaluations. Student self-assessment of selected ABOs was also instituted for the P2 and P3 students. All data has been entered into TracDat<sup>®</sup>. Evaluations from the Clinical Seminar course (PHPR680) are also used as an assessment metric, and entered into the TracDat<sup>®</sup> system. Faculty have recently been provided full access to TracDat<sup>®</sup>, providing a significant level of transparency in the assessment process. The College's Assessment Plan outlines additional measures that are currently evaluated and that will be evaluated as assessment is expanded to encompass a broader range of outcomes. This represents a significant advance in assessment activities from the 2004 Self-Study.

The College has completely revised its admission process to comply with the Standards 2007 requirement for in-person interviews. This has had a notable effect on applicant numbers, with a decrease seen in the past two years. It is felt that implementation of the new curriculum, without an early graduation option, may also be responsible for the smaller applicant pool. Despite this, grade point averages and PCAT scores for the most recently admitted classes have shown only a small decline as more top-ranking candidates are accepting admission to the College. To address applicant pool concerns, the College will be further modifying its admission process for the 2011 year, utilizing the PharmCAS admission process for the first time.

External funding for students has more than doubled in the past six years with over \$160,000 awarded in the Spring, 2009, Honors Convocation. Private and corporate scholarship support for academically outstanding students in each year of the curriculum has more than doubled since 2004. The substantial growth in student support is a direct reflection of the Dean's ability to work with various stakeholders. Efforts continue to ensure that the most qualified candidates are admitted to the College and that financial awards recognize academically outstanding students.

Faculty, staff and administrators have worked diligently over the past six years to address the issues raised in the 2004 site visit, to comply with Standards 2007 and to effectively engage issues unique to the College. This has resulted in a new curriculum implemented in 2009, a revised admission process in 2009, expansion of an initial assessment plan, renovation of several key facilities within the College with anticipation of a new off-campus instructional site in 2011. Student achievement has been consistently above national and state averages as indicated by NAPLEX and MJPE scores of graduates. In an environment of declining State support and increasing program

options for students, College metrics have shown improvement. Faculty members have demonstrated dedication and innovation through participation in an impressive plan to introduce active learning in the classroom.

The importance of a well documented, objective and consistent admission process, clearly communicated to all appropriate stakeholders, is recognized by the College. Revision of the admission process over the past two years has focused on ensuring that all candidates are treated fairly and that the most qualified candidates are offered admission to the program. This is evidenced by revision of the Pharm.D. Curriculum that began in 2006 with initial development of the pre-pharmacy course requirements. The pre-pharmacy requirements were addressed first to ensure that all pre-pharmacy programs and candidates were fully aware of changes with adequate time to meet them (Appendix 17.1). Adoption of face-to-face interviews as a component of the admission process was announced via the College's website and through direct communication with outside institutions well in advance of actual implementation. Interviews were included as a potential component of admissions two years prior to actual implementation. Additionally, the program's web-based application is updated annually to reflect evolving standards including criminal background checks and drug screening procedures with the implications of positive findings clearly outlined. (See Pharmacy Web-site [http://www.ferris.edu/htmls/colleges/pharmacy/link\\_desc.cfm?LinkID=59](http://www.ferris.edu/htmls/colleges/pharmacy/link_desc.cfm?LinkID=59) and Pharmacy Application <https://www.ferris.edu/admissions/application/pharm/>)

All admissions materials are available through the College website to provide candidates with the most current information. This includes a thorough discussion of admission criteria (see Appendix 17.2 (a)) with a compilation of academic demographics for the most recent class. Supplemental information requested on the application includes: previous employment, community service activities and student/professional organization memberships. To be considered for admission to the Doctor of Pharmacy program, the applicant must have a cumulative pre-pharmacy required course GPA of no less than 2.5 and a PCAT composite score of no less than the 50th percentile. A complete discussion regarding criminal background searches and drug screens is provided and candidates are encouraged to contact University or College representatives for additional information. Students enrolled in the pre-pharmacy curriculum at Ferris State University and participating in its Honors Program are eligible for the "honors assurance" (see criteria in Appendix 17.2(b)). The purpose of this program is to attract top-quality students to the University's pre-pharmacy program and to alleviate the anxiety of honors students who were concerned about their admissions status, despite having outstanding academic credentials. General information regarding admissions to the College is included in Appendix 17.3 and 17.4. The College Admissions Committee (CPAC) annually reviews the admissions formula used to rank candidates. The review consists of a statistical regression of various admission metrics (primarily prerequisite GPA and PCAT scores) and student performance in the Doctor of Pharmacy program. The resultant formula consists of coefficients (weightings) of composite scores in math, biology and chemistry courses as well as PCAT and interview scores. The formula results in a ranking for each candidate. Adjustments to the formula are made annually based on the performance of the entering class, with weightings modified to identify candidates more likely to be successful in the curriculum. The results of the regression are shown in Appendix 17.5 for entering classes between 2005 and 2008. The annual review and admissions formula revision is validated by a consistently low rate of attrition within the program; for admission years 2004-2008, approximately 4% of the admitted class were dismissed or withdrew from the program.

The current enrollment of 150 entering students annually is based on the number of faculty members within the College, the College's physical facilities as well as experiential placement

capacity at appropriate clinical practice sites. In 2008, the College undertook an extensive renovation of the primary instructional auditorium, increasing student comfort and technological resources. Although actually decreasing the room capacity, student comfort is enhanced with the installation of more appropriate seating and improved audio/visual support. The off-campus instructional sites are designed to accommodate a total of 150-155 students with up to 95 students in the Grand Rapids site and up to 60 students in the Kalamazoo site. Faculty positions were added recently to ensure appropriate experiential instruction of students and maintain prescribed student:faculty ratios. The model also includes significant reliance upon adjunct faculty in addition to the added faculty positions. However, recent budgetary reallocations have reduced funding levels for support of adjunct faculty, creating uncertainty regarding the viability of the College's routine use of adjunct faculty for preceptorship of both required and elective clerkships. In addition, funding for existing open faculty positions have been reduced and it is currently uncertain if full funding will be restored to allow for appointment of faculty. Administrative restructuring within the College has been completed, creating department chair positions within both departments and eliminating the existing Department Head positions. This structure was implemented due to the elimination of the Assistant Dean/Department Head of Pharmaceutical Sciences position in 2009.

Enrollment and selection of students is controlled by the CPAC with review by the Dean. Members of the CPAC are selected by each department at the beginning of the academic year and the committee is chaired by the Assistant Dean of Student Affairs and Assessment. Application information is collected using an online application and supplemental application. PCAT scores and transcripts are also collected for each student. Using this information, a preliminary rank is established assessing PCAT score and GPA for the purposes of determining eligibility for an on-site, face-to-face interview (with extemporaneous essay). Following the interview a final rank is established using GPA (biology, chemistry, math), PCAT, interview score (including essay) and course load adjustment (e.g. course repeat penalty). Invitations for conditional admission (top 150) are then sent, along with a wait list priority number for students beyond the 150<sup>th</sup> spot. Enrollment levels are determined by the Dean in discussion with the University President and Provost. The most recent enrollment adjustment occurred in fall 2003, with an expansion plan that called for an enrollment increase of 10 students annually for three years. That expansion is now complete, with an annual enrollment cap of 150 students.

Because communication skills are essential for success in the curriculum and the profession, a face-to-face interview has been added to the application process. The applicant interview rubric (Appendix 17.6) includes evaluation of the candidate's ability to articulate their desire to become a pharmacist, their desire to attend the College, their ability to clearly and concisely describe the use of a common device and a summative evaluation of their use of English and their speaking skills. All evaluators are trained in the use of the rubric which was developed with the assistance of the University's Director of Equal Opportunity who has expertise in recruitment/interviewing. An extemporaneous essay is also included as part of the on-site, face-to-face interview in order to assess written literacy skills.

The CPAC reviews annual data correlating pre-pharmacy admission information (math, biology, and chemistry GPA; PCAT Score) with performance in the Doctor of Pharmacy program. Regression results for the biology GPA, chemistry GPA and PCAT composite score are shown in Appendix 17.5. The data indicate that the use of the combination of pre-pharmacy biology and chemistry GPA, along with PCAT composite are predictive of performance in the program (across all students) and validate their usefulness for ranking applicants. The interview process was employed for the first time during the 2009 admission process. Continuation of the interview process will allow for inclusion of interview results in the admission formula in the most predictive manner.



As a validation of the admission process, three metrics are highlighted: 1) The rate of attrition in the program which stands at 4% overall (2004-2008 admission classes); 2) Results from the *AACP Graduate Survey* show 74.3% of graduates in 2007 and 81% of graduates in 2009 agreed or strongly agreed that the admission process for the College was well organized; and 3) NAPLEX results for recent graduates (Appendix 17.7a). FSU first-time graduates score on par with state averages and above national averages.

The applicant pool has fluctuated somewhat in recent years (Appendix 17.3 and 17.4); however, this has not led to a change in class size, nor compromised the admission requirements. The recent downturn in applicants is attributable to the implementation of a minimum PCAT score (50<sup>th</sup> percentile), discontinuation of the accelerated program, increasing pharmacy program options in the Great Lakes region and economic downturn in the state. In light of the recent reduction in applicant numbers, the College has stepped-up recruitment efforts. Further efforts specifically intended to increase minority enrollment are now under review by the College's Diversity Committee and Admission Committee.

In its second year of implementation, the interview process has been conducted in an organized and deliberate manner to ensure a fair and impartial process that enhances the College's ability to identify the most appropriate applicants for admission while also providing candidates with an in-depth view of the College, its faculty and the curriculum. The interview, coupled with a sophisticated admission process relying on annual regression analysis of admission performance metrics to appropriately rank candidates based on their ability to succeed in the curriculum, has proved successful. As a summative assessment, attrition rates are consistently low throughout all four years of the program. Additionally, on the NAPLEX, graduates of the College have pass rates competitive with state averages and above the national average. In addition, the College has worked hard to maintain an extensive list of up-to-date admission guides for most 2-year and 4-year colleges and universities across the State of Michigan to assist students from urban and rural areas in pursuing a career in pharmacy.

As a matter of routine practice, admission criteria will continue to be refined with the incorporation of face-to-face interviews and more detailed supplemental information requests. As those students move through the four-year curriculum, additional regression analysis will provide guidance for revision of the admission formula. Expanded recruitment efforts will ensure depth and diversity within the candidate pool.

### **C. Program Relevance**

Since the pharmacist shortage of the last decade, a more detailed manpower estimate has been developed and maintained by the Pharmacy Manpower Project. This report reflects the current demand for pharmacists as well as the supply of graduates, especially important in light of the continued pharmacy program development throughout the country. Monthly updates are provided with all information accessible at:

<http://www.aacp.org/resources/research/pharmacymanpower/Pages/default.aspx>

A five-point scale, the Aggregate Demand Index (ADI), has been developed to measure pharmacist supply/demand. With 5.0 indicating a high demand and difficulty filling positions; 3.0 indicated an equal demand and supply and 1.0 indicates that demand is much less than supply. In June, 2010, the ADI was 3.33 nationally and decreased slightly to 3.28 in July. This reflects a slight decrease from July, 2009, of 3.69. In the Great Lakes region, ADI's ranged from 3.0 in Michigan to 3.67 in Wisconsin. The ADI for the East North Central region of the Midwest is 3.33, indicating that demand is somewhat higher than supply.

The increased ADI seen at the start of this century, lead the College to increase program enrollment 25% in incremental steps from 2003 to 2005, increasing program enrollment from 480 to

600. Similar enrollment increases were seen at Wayne state University and The University of Michigan. Thus, the balanced ADI reflects a notable increase in demand as supply is significantly increased since the last program review. In addition to close attention to the ADI, the College's recent curricular revision reflects attention to changes in the role of the pharmacist with increased patient care expectations as evidenced by reimbursable cognitive services including Medication Therapy Monitoring through Medicare and other insurance providers. In addition, NAPLEX pass rates serve as a surrogate marker of the curriculum's relationship to workforce expectations.

The College utilizes a national pharmacy graduate survey, developed by the American Association of College's of Pharmacy and The Accreditation Council for Pharmaceutical Education. This survey, developed in 2007 and first used by the College in 2008, indicates broad student satisfaction with the College and curriculum. Criteria has been established, requiring a positive response (strongly agree or agree) in two-thirds of respondents to meet the college expectations. (additional assessment information?)

In general, the College's 110-year reputation attracts students from the Great Lakes region, with most students coming from within the state. Routinely, students describe an encounter with a college alumni that prompted their interest in the profession and in attending Ferris. In addition, projections of significant demand for pharmacists prompted by the aging 'baby-boomers' and continued expansion of medical management of chronic diseases have lead to significantly increased salaries. This combination of expected demand and lucrative salaries has led to increased candidate interest in the last several years, although the two most recent admission cycles have shown a downward trend in both numbers and academic demographics of students as shown in the following graphs.

To respond to this trend, the College will be further modifying its admission process for the 2011 Class, utilizing the national pharmacy college admission service (PharmCAS) which is anticipated to increase applicant numbers. PharmCAS is now used by approximately three-quarters of all colleges of pharmacy, including The University of Michigan and Wayne State University. In addition, the Assistant Dean for Student Affairs and Assessment was filled in August, 2009, after a vacancy of two years. During the vacancy, recruitment efforts were somewhat limited with visits to two-and four-year programs in the state reduced. Since August 2009, recruitment efforts have been increased with particular emphasis placed on recruitment of a diverse student population.

#### **D. Program Value**

Pharmacy has long been recognized as one of the University's oldest and most renowned programs with over 8000 graduates, many actively engaged in the University's alumni association, thus contributing to the University's vitality and reputation. Further, as a source of the majority of community pharmacists in the State, the College is recognized by patients throughout the state for its contribution to health care.

In addition to the students in the doctor of pharmacy program, over 400 students are enrolled in the College of Arts and Sciences in the Pre-Pharmacy curriculum. Further, among those students in the University's Honors Program over half are listed in the pre-pharmacy curriculum. Admission statistics for the doctor of pharmacy program indicate that students enrolled in the University's pre-pharmacy curriculum have a higher rate of acceptance than external students. This is recognized by many students and leads to a preference to complete all or a portion of pre-pharmacy studies at the University. In addition, the College has worked with the Honors program to provide an 'interview assurance' for all Honors Students meeting a specific academic and course requirements. Although unable to guarantee admission to the College as a result of accreditation limitations, the Honors Assurance has been seen by students as a significant advantage in a competitive admission environment.

Students graduating from the program recognize the benefit of the curriculum, the faculty and the facilities that include the on-campus building as well as the College's off-campus instructional sites and a network of over 30 off-campus, tenure-track practice faculty and over 300 adjunct preceptors. Students' perceptions are confirmed in the 2008 and 2009 AACP/ACPE Graduate Survey. Four questions specifically address students' opinions of the program and are outlined below.

Survey questions	2008	2009
I am prepared to enter pharmacy practice	87.6%	84.4%
If I were starting my college career over again, I would choose to study pharmacy	78.8%	82.8%
If I were starting my college career over again, I would choose the same college of pharmacy	66.3%	65.5%
I would recommend a career in pharmacy to a friend or relative	93.0%	89.7%

The College faculty, administration and staff contribute to a variety of entities outside of the College and University. Perhaps the most visible display of service to the profession is the level of participation by faculty and administration in the Michigan Pharmacists Association Annual Convention and Exposition. Annually, college faculty members provide multiple presentations and panel discussions at the convention. Further, many of the MPA's standing committees include college faculty or administrators. This degree of support at the state level ensures that the College is recognized within the profession as a vital source of professional knowledge and support. Administrators serve as site visitors for the Accreditation Council for Pharmaceutical Education; faculty and administrators serve on a variety of committees and councils in the American Association of Colleges of Pharmacy. Several faculty members have served in leadership roles in professional organizations and have been recognized for their service and contributions.

This level of involvement advances the reputation of the College and the University. In addition, students see the contributions of the faculty to professional organizations and recognize the importance of maintaining a level of commitment to the profession. Further, faculty and administrators participation ensures that they maintain a contemporary understanding of the profession and academia. A more detailed listing of faculty and administrators' service and scholarship is available in Addendum C of this document.

## **Section 2. Collection of perceptions**

As a requirement for accreditation, the College must utilize the national AACP/ACPE Surveys on a regular basis. The complete battery of surveys consists of a graduate survey (to be administered prior to or at graduation), an alumni survey (for graduates several years in practice), a preceptor survey (that functions much like an employer survey and is used for that purpose in this report) and a faculty survey.

This process was introduced in 2007 and the College converted in 2008 to use of the national surveys. Data is compiled by AACP with results provided to the College's ADSAA for discussion in the Assessment Committee.

Six complete surveys are provided for APRC review in a separate volume: Graduate surveys 2008 and 2009; Alumni survey 2008, Preceptor survey 2008 and the Faculty surveys 2007 and 2008. (See AACP Annual Surveys – separate compendium.) Data points from each of the surveys has been entered into the College's TracDat database with criteria established to indicate achievement of each item.

Overall, the Graduate surveys indicate student satisfaction with the Doctor of Pharmacy curriculum, experiential components of the curriculum, student services, student experiences, facilities, experiential sites, educational resources and overall impressions of the program and profession. The Alumni survey, conducted only among graduates from the Doctor of Pharmacy curriculum since 2000, reflects an even more positive impression of the educational experience with 87.5% of respondents rating “the overall quality of my education experience as very good.”

The preceptor survey conducted in 2008 was completed by 148 of the College's adjunct faculty members a represented a broad range of practice specialties. Areas of communication, curriculum and resources/support were evaluated. The opportunity to provide feedback regarding the curriculum was identified as a concern by preceptors with all other metrics acceptable. This is being addressed with increased involvement of preceptors in course development through the Experiential Advisory Board. The Faculty survey was conducted in 2007 and 2008. In 2008, a total of 21 faculty responded with a variety of concerns expressed in areas that included the administrative structure/system, recruitment and retention, infrastructure (including faculty numbers), role and governance of the College, and faculty development. The curriculum and teaching were evaluated positively by the respondents.

Results continue to be collected on an annual basis for graduates with a 2-3 year schedule for all other surveys.

## Section 3: Program Profile

### A. Profile of Students

Addition student demographics are outlined below. Student are required to be full-time in the program with the exception of a very small number of students with extenuating circumstances. Classes are scheduled in a lock-stepped format and are predominantly offered during the day. There are no fully online courses. A small number of courses use mixed delivery format. Each class is admitted in the Fall semester and student are expected to progress through the program on a full-time basis with completion in four academic years.

	2005	2006	2007	2008	2009*	2010*
Total Applicants	767	734	806	752	458	421
Qualified	566	499	615	464	269	242
Admitted	150	150	150	150	150	150
GPA	3.64	3.69	3.74	3.76	3.68	3.63
Pharmacy College Admission Test	416 (79%)	418 (82%)	422 (86%)	419 (83%)	416 (74%)	417 (73%)
FSU Students Admits <sup>†</sup>	48 (32%)	67 (45%)	58 (39%)	75 (50%)	90 (60%)	90 (60%)
Honors Stud Admits	33 (22%)	40 (27%)	36 (24%)	43 (29%)	64 (43%)	61 (41%)
External Stud Admits	102 (68%)	83 (55%)	92 (61%)	75 (50%)	60 (40%)	60 (40%)
Michigan Students	130 (87%)	125 (83%)	136 (91%)	132 (88%)	141 (94%)	141 (94%)
Non-MI Students	20 (13%)	25 (17%)	14 ( 9%)	18 (12%)	9 (6%)	9 (6%)
Foreign Students	7 ( 5%)	9 ( 6%)	4 ( 3%)	9 (6%)	3 (2%)	3 (2%)
BS Degree	23 (15%)	17 (11%)	16 (11%)	20 (13%)	23 (15%)	19 (13%)
Male	67 (45%)	66 (44%)	68 (45%)	72 (48%)	69 (46%)	78 (52%)
Female	83 (55%)	84 (56%)	82 (55%)	78 (52%)	81 (54%)	72 (48%)

The College of Pharmacy awards a number of scholarships, grants and gifts to students in the Doctor of Pharmacy program. This includes the annual Pharm.D. scholarship, which is awarded to 35 students based on academic performance and financial need. The Pharm.D. scholarship consists of \$3,000 per year for 4-years. In addition a large number of smaller grants and gifts are awarded each year during the honor's convocation. These provide over \$160,000 each year to help students offset costs of the Doctor of Pharmacy program. As an example, awards from the 2010 convocation include:

#### P4 Awards – 2010

- Dr. Robert A. Zustiak Memorial Award – (plaque) – **Jessica Schultz**
- Mylan Pharmaceuticals, Inc. Excellence in Pharmacy Award (Plaque) - **Cara Greig**
- Michigan Society of Health-System Pharmacists Student Recognition Award (plaque & \$100)- **Steven Wallner**
- Dr. William C. Sunkes Memorial Award (medallion) – **Mary Andre**

- Facts & Comparisons Award of Excellence in Clinical Communications (books & marble bookends) – **Elizabeth Casselman**
- Michigan Pharmacists Association Dean’s Professionalism Award (\$300 & plaque) – **Nathan Everson**
- Dr. Wanda J. Butler Memorial Award (\$500 & Oberlisk) – **Katie Hinkle & Cara Greig**
- Dr. M. Robert Buchdahl Memorial Award (\$500 & Oberlisk) – **Nathan Everson**
- TEVA Industrial Pharmacy Award (\$200) – **Kay Lauer**
- VG’s Scholarship (\$1,000) – **Jessica Ninke**
- Dr. Harry S. Swartz Memorial Award - \$300 – **Allison Sabo**

### **P3 Awards – 2010**

- Willis J. Heyl Award in Natural Product chemistry (\$100) – **Sarah O’Herron**
- Genetech Pharmacy Communications Award (plaque – from Co.) – **Shawna O’Shea**
- Kmart Scholarship Award – (\$1000) – **Katie Georges**
- Brudy Endowment Scholarship (\$1500) – **Phuong Nguyen**
- Jordan Scholarship (\$2000 x 2) - **Zachary Kirschner, Matthew Harrison**
- Jordan Scholarship (\$1500 x 2) – **Steven Bonkoski, Sarah O’Herron**
- Jordan Scholarship (\$1000 x 2) – **Charles Seskevics, Christopher Kirkpatrick**
- Michigan Pharmacy Foundation Scholarship (\$2500) – **Jessica Schoenherr**
- Kenneth A. & Alma M. Rumsey Memorial Scholarship (\$3000) – **Shawn Depcinski**
- Jack M. Newcomb Scholarship Award (\$1500) – **Sarah Gilbert**
- Merithew Scholarship (\$2000 x 3) – **Tara Elam, Adrian Ponik, Emily Jacobs**
- Merithew Scholarship (\$1500 x 3) – **Melissa Wernette, Lindsay Simonetti, Jason Popke**
- Merithew Scholarship (\$1000 x 9) – **Sunao Slayton, Sara Bergman, Hala Mouhydeen, Melissa Hill, Ashlee Maier, Sarah Fay, Rachel McWethy, Michelle Tran, Tanyanyiwa Magocha**
- Burg Scholarship (\$1000) – **Julie Dunn**
- Harper T. Wildern Scholarship (\$1000) – **Kevin Walsh**
- Wildern family Pharmacy Scholarship (\$1000 x 2) – **Diana Sprouse, Shawna O’Shea**
- Natural Medicines Comprehensive Database Recognition Award – **Christopher Weeks**
- Brian McDonald Scholarship (\$1000) – **Elizabeth Kyle**
- Alumni Scholarship Award (\$1000) – **Roger Gerstenberger**
- Walgreen Scholarship (\$2000) – **Jane Schaefer**
- Glen’s Scholarship (\$1000) – **Davin Partanen**
- CVS/Pharmacy Intern P3 Scholarship (\$1000) – **Marissa Bober**
- CVS/Pharmacy P3 Scholarship (\$1000) – **Richard Caszatt**
- Curtis Scholarship (\$1000 x 3) – **Julie Lewandowski, Amy Thomson, Kaitlyn Priniski**
- Wal-Mart Scholarship Award (\$1,000) – **Giang-Huong Nguyen**
- Meijer Scholarship Award (\$1500) – **Stephanie Freed**
- Cummings Scholarship (\$1500 x 2) – **Amanda Fletcher, Angela Vanderberg**
- Cummings Scholarship (\$1000 x 3) – **Christopher Fisher, Flint Spitler, Jessica Olds**
- Kossaras Scholarship (\$1000) – **Christopher Wolfinger**
- Mathison Scholarship (\$1000) – **Caitlyn Zolp**

- Dengler Scholarship (\$1000 x 2) – **Lindsey Selves, Deanna Courville**
- Olson Scholarship (\$1000 x 2) – **Disha Patel, Colleen West**
- Merck Award – Books – **Mark Jurges**
- William Merle Morris Scholarship - Veterans (\$1000 x 2) – **Douglas VanStrien, Erik Riutta**
- Karlis Kazerovskis Scholarship (\$250) – **Tila Sithiphone**

## **P2 Awards – 2010**

- Dean’s Advisory Board Chairperson (Plaque) – **Erin Calcutt**
- NCPA Outstanding Student Member of the Year Award– **Jessica Long**
- CVS/Pharmacy P-2 Scholarship Award (\$1000 x 2) – **Rachel Jameson, Suzanne Palmer**
- CVS/Pharmacy P-2 Intern Scholarship Award (\$1000) – **Ola Cheaito**
- Rite Aid P2 Intern Scholarship Award (\$1000) – **Jigar Patel**
- Rite Aid Scholarship Award (\$1000) – **Andrea Townsend**
- Kmart Scholarship Award (\$1500) – **Kimberly Betters**
- Walgreen Minority Scholarship Award (\$2000) – **Daniel Rajan**
- Brudy Scholarship (\$1000) – **Megan Hansen**
- Pharmacists Mutual Scholarship (\$1000) – **Qinglu Ren**
- Kenneth A. & Alma M. Rumsey Memorial Scholarship (\$3000) – **Jill Bianco**
- Robert S. & Agnes Y. Jordan Scholar (\$2000) – **Michael Pfeiffer**
- Robert S. & Agnes Y. Jordan Scholar (\$1000) – **Ahmad Mohamad-ali**
- Wal-Mart Scholarship Award (\$1,000 x 2) – **Steven Ismail, Ajay Patel**
- Alumni Scholarship (\$3000) – **Matthew Brand**
- Alumni Scholarship (\$2000) – **Ryan Greenley**
- Jack M. Newcomb Scholarship Award (\$1000) – **Jennifer Harsch**
- Cummings Scholarship (\$1000 x 3) – **Elise VanRemortel, Leah Damiano, Jessica Benzer**
- Family Fare Intern Scholarship (\$1000) – **Daniel Boldt**
- ShopKo Scholarship (\$1000) – **Hani Elladki**
- Merck Awards (books) – **Amanda Niemi**
- Oakland Area Scholarship (\$500) – **Diana Behnam**
- Curtis Scholarship (\$2000) – **Joel Heiney**
- Curtis Scholarships (\$1000 x 2) – **Matthew Satkowiak, Andrew Kalman**
- George & Kathryn Menoutes Scholarship (\$1000) – **Jessica Long**
- Upper Peninsula MPA Scholarship – (\$500) – **Amanda Bedard**
- Northern MI society of Hospital Pharmacists Award (DiPero’s Text) – **Erin Gressick**
- Merithew Scholarships – (\$2500 X 2) – **Brandon Bensinger, Jason Williamson**
- Merithew Scholarships (\$1000 x 2) – **Loubna Mouhydeen, Kyoko Marcussen**
- Mathison Scholarship – (\$1000) – **Rebekah Grice**
- NACDS Scholarship (\$1500) – **Andrew Davis**
- NACDS Scholarship (\$1000 x 2) – **Tiana Capy, Matthew Balke**
- Hagerman Scholarship (\$500) – **Joshua McNair**
- Academy of Students of Pharmacy Outstanding Member Award – **Megan Hansen**

### **P1 Awards – 2010**

- Rite Aid P1 Intern Scholarship Award (\$1000 x 2) – **Joseph Munroe, Dustin Huss**
- Rite Aid P1 Scholarship Award (\$1000) – **Kody King**
- Pharmacists Mutual Book Award (DiPiero's Text) – **Brandy Schlagel**
- CVS/Pharmacy Scholarship Award (\$1000) – **Stacy Brousseau**
- Jack M. Newcomb Scholarship Award (\$1000) – **Karrie Juengel**
- Rumsey Scholarship (\$3000) – **Hien Do**
- Jordan Scholarships (\$1500 X 8) – **Auburn Olson, Nicole Buescher, Crystal Campbell, Ashley Carpenter, Michelle Dionne, Kayla Uganski, Dylan Lawrence, Brian Ogrin**
- Jordan Scholarships (\$1000 x 7) – **Fawn Rohde, Sean Loftus, Trevor Warner, Amy Hunter, Krystle Timsak, Luke Hemingway, Kyle Schmidt**
- Alumni Scholarships (\$1000 x 3) – **Jaclyn Maynard, Natalie Smith, Alex Gargano**
- Dr. Adnan Dakkuri award (\$250) – **Jordan Newman**
- Family Fare Internship Scholarship (\$1000) – **Paul Harcourt**
- Paul & JoLaine Draugalis Scholarship Award (\$1000) – **Michael Spence**
- Mathison Fellowship – (\$1,000 x 2) – **Julianna Van Enk, Nathaniel Bergman**
- Merck Award – Books – **Kersten Fisher**
- Merithew Scholarships (\$2000 x 6) – **Jordan Newman, Ryan Dobie, Mary Jewell, Emily Carr, Lindsey Sims, Chi Ngo**
- Merithew Scholarships (\$1000 x 3) – **Ahzam Afzal, Jessica Maher, Tammy Lyberg**

Students are also involved in a number of professional organizations including student chapters of the American Society of Health-System Pharmacists and National Community Pharmacy Association, as well as the Association of Students of Pharmacy. These organizations provide opportunities for students to participate and local and national meetings and participate in national patient counseling and clinical skills competitions. Students also participate in a mock pharmacy seminar as part of a capstone course in the 4<sup>th</sup> professional year. Students prepare a professional seminar grade presentation on a contemporary pharmacy topic. A sample schedule of the most recent clinical seminar and upcoming topics are presented on the next page:



**August 2010 Clinical Seminar Presentation Schedule (by Topic)**

	<b>8:30 AM</b>	<b>Computer Lab (Cardiology)</b>	<b>Room 505 (Herbals)</b>	<b>Room 4 (Diabetes)</b>	<b>Room 5 (Addiction)</b>	<b>Room 6 (Miscellaneous)</b>
<b>Topic</b>		Is colchicine an effective treatment for pericarditis?	What is the role of Vapocoolant in reducing injection/needle insertion pain in children?	Roboxistaurin for diabetic eye disorder	The use of modafanil for cocaine dependence	Alvimopan to prevent ileus after bowel surgery
<b>Student Presenter</b>		Cheato	Fletcher A.	Ly	Hill L.	Wuergler
<b>Faculty Advisor</b>		Bouthillier	Jameson	Hanson	Hagerman	Smith
	<b>9:10 AM</b>	<b>Room 450 (Cardiology)</b>	<b>Room 505 (Herbals)</b>	<b>Room 4 (Diabetes)</b>	<b>Room 5 (Addiction)</b>	<b>Room 6 (Miscellaneous)</b>
<b>Topic</b>		Is hyperbaric oxygen therapy an effective adjunct for improving outcomes in cases of diabetic foot ulcer?	Does Bitter Orange, which is structurally similar to ephedra, cause cardiovascular complications	Efficacy of Red Yeast Rice on dyslipidemia	Gabapentin for cocaine addiction	Metoclopramide to improve lactation in nursing mothers?
<b>Student Presenter</b>		Magnet	Gilbert	Broxterman	Marsh	Isi
<b>Faculty Advisor</b>		Koski	Meny	Bailey	Straley	DeHoag
	<b>9:50 AM</b>	<b>Room 450 (Cardiology)</b>	<b>Room 505 (Herbals)</b>	<b>Room 4 (Diabetes)</b>	<b>Room 5 (Addiction)</b>	<b>Room 6 (Miscellaneous)</b>
<b>Topic</b>		The role of HGH in Heart Failure	Is Green Tea an effective option for reducing the risk of cardiovascular disease?	Orlistat versus sibutramine for weight loss in patients with type 2 diabetes	Quetiapine for alcoholism	Roflumilast for COPD
<b>Student Presenter</b>		Hall	Partanen	Rogers	Okpue	Nguyen
<b>Faculty Advisor</b>		VanLoo	Elder	Covyeou	Hagerman	Nienhuis

	<b>10:30 AM</b>	<b>Room 450 (Cardiology)</b>	<b>Room 505 (Herbals)</b>	<b>Room 4 (Diabetes)</b>	<b>Room 5 (Addiction)</b>	<b>Room 6 (Miscellaneous)</b>
<b>Topic</b>		Effient (Prasugrel) for acute coronary syndromes	Homocysteine lowering vitamin B therapy for secondary prevention of stroke	Does sulfonylurea treatment increase the risk of pancreatic cancers?	Efficacy of topiramate for treatment in alcohol dependence	Efficacy of proton pump inhibitors in the treatment of asthma
<b>Student Presenter</b>		Makki	Patel D.	Baumgard	Sprouse	Simonetti
<b>Faculty Advisor</b>		deVoest	Meny	Lee	Mersfelder	Bailey
	<b>11:10 AM</b>	<b>Room 450 (Cardiology)</b>	<b>Room 505 (Herbals)</b>	<b>Room 4 (Diabetes)</b>	<b>Room 5 (Addiction)</b>	<b>Room 6 (Miscellaneous)</b>
<b>Topic</b>		Use of vitamin K supplements for patients on warfarin with fluctuating INRs	Garlic reducing cardiovascular risks	The potential role of Anti-CD3 antibodies, particularly teplizumab, in the treatment of new-onset diabetes	What is the role of nicotine in Parkinson's Disease?	Bupropion for weight loss in overweight patients?
<b>Student Presenter</b>		West	Schollaart	Gerstenberger	Mouhydeen	Khan
<b>Faculty Advisor</b>		Koski	Schulz	Covyeou	VandenBussche	Smith
<b>LUNCH</b>		<b>LUNCH</b>	<b>LUNCH</b>	<b>LUNCH</b>	<b>LUNCH</b>	<b>LUNCH</b>
	<b>1:00 PM</b>	<b>Room 450 (Neurology)</b>	<b>Room 505 (Infectious Diseases)</b>	<b>Room 4 (Psychiatry)</b>	<b>Room 5 (Pediatrics)</b>	<b>Room 6 (Dermatology)</b>
<b>Topic</b>		Dexmedetomidine as an adjunct for analgesia/anesthesia	Cranberry juice to prevent the recurrence of UTIs	Protein kinase C inhibitor (tamoxifen) for the treatment of Bipolar Disorder	Are probiotics effective for the prevention of atopic dermatitis in pediatrics?	Ustekinumab, a new treatment for psoriasis
<b>Student Presenter</b>		Monroe	Bazzi	Donato	Sithiphone	Gabor
<b>Faculty Advisor</b>		Mersfelder	Klepser	Straley	VandenBussche	Lee

	<b>1:40 PM</b>	<b>Room 450 (Neurology)</b>	<b>Room 505 (Infectious Diseases)</b>	<b>Room 4 (Psychiatry)</b>	<b>Room 5 (Pediatrics)</b>	<b>Room 6 (Dermatology)</b>
<b>Topic</b>		Is Albendazole effective in the treatment of neurocysticercosis?	Mega-dose vitamin C in treatment of the common cold	Dose Modafinil have a place in ADHD therapy?	Should growth hormone therapy be used in children with idiopathic short stature?	Is sertraline efficacious for cholestatic pruritus?
<b>Student Presenter</b>		Yancich	Lee	Maier	Norris	Lukins
<b>Faculty Advisor</b>		Jameson	Elder	VanLoo	Thill	Raguckas
	<b>2:20 PM</b>	<b>Room 450 (Neurology)</b>	<b>Room 505 (Infectious Diseases)</b>	<b>Room 4 (Psychiatry)</b>	<b>Room 5 (Pediatrics)</b>	<b>Room 6 (Dermatology)</b>
<b>Topic</b>		Lacosamide as adjunctive treatment for partial-onset seizures?	Does treatment with zinc supplements reduce severity and duration of symptoms associated with the common cold	Weight Gain Associated with the medicinal treatments of psychiatric disorders	Should dextromethorphan be given in the pediatric population?	Is selective 5-HT3 antagonist ondansetron, safe and effective as prophylaxis for intrathecal morphine-induced pruritus?
<b>Student Presenter</b>		Briggs	Lee	Policicchio	Hurn	Spears
<b>Faculty Advisor</b>		Koski	Klepser	Bernknopf	DeHoag	Rowley

Student Topics and Schedule  
January - March 2011

Faculty	Topic	Full Name and WebCT ID	Last Name
Feucht	Can the use of Statins prevent or reduce the advancement of Alzheimer's dementia	Morgan Anderson (anderm15)	Anderson M.
Hagerman	Can Long Term ADHD Pharmacotherapy Contribute to Substance Abuse in Adults?	Nicholas Anderson (andern10)	Anderson N.
Meny	The role of autologous serum eye drops in treatment for dry eye	Gregory Baker (bakerg)	Baker
Meny	Is mometasone furoate nasal spray effective for symptoms of acute sinusitis?	David Beckman (beckmad2)	Beckman
Thill	The use of Macrolide Antibiotics in COPD Therapy	Brent Beemer (beem7)	Beemer
Smith	The effectiveness of Pyridoxine (Vitamin B6), alone or in combination, in preventing Myelosuppression associated with Linezolid	Andrew Biskupski (biskupa)	Biskupski
Schulz	Methotrexate for the treatment of Ectopic Pregnancy	Marissa Bober (boberm1)	Bober
VandenBussche	Use of Intranasal Steroids to Treat Children with Obstructive Sleep Apnea	Christopher Brink (brinck)	Brink
Straley	Does ondansetron have a place in the management of Schizophrenia?	Jordan Bruni (brunij)	Bruni
Bakus	The use of deer antler velvet for arthritis	Caleb Bryant (bryantc2)	Bryant
Straley	Vitamin D Supplementation as a Treatment for Depression	Lesley Cameron (camerol)	Cameron
DeHoag	Efficacy of using Pramlintide (Symlin) for obesity pharmacotherapy	Ashley Cannon (cannona3)	Cannon
Klepser	Critical evaluation of telavancin for VAP	Truong Cao (caot)	Cao
Straley	The use of antidepressants in adolescents	Richard Caszatt (caszatr)	Caszatt
VandenBussche	The use of inhaled aztreonam for the treatment of pulmonary Pseudomonas aeruginosa infections in cystic fibrosis patients	Shawn Depcinski (depcins)	Depcinski
Thill	The Use of Levosimendan for improving LV function in Heart Failure	Rebecca DuPrey (dupr3)	Deprey
Lee	provigil for fatigue in MS	Kevin DeRidder (deriddk)	DeRidder
VandenBussche	Nebulized Hypertonic Saline for Treating Infants with Bronchiolitis	Julie Dunn (dunnj6)	Dunn
Bailey	The Use of Probiotics in the Treatment of Irritable Bowel Syndrome	Tara Elam (elam2)	Elam
Ross	Do probiotics prevent antibiotic-associated diarrhea in children? (excluding C. difficile infection)	Sarah Fay (pennins1)	Fay
Thill	Using Hypertonic Saline in the treatment of cystic fibrosis	Zachary Fettes (fett13)	Fettes
Morse	Does Rhodiola increase athletic performance?	Christopher Fisher (fisherc5)	Fisher
Bouthillier	Denosumab and it use in Osteoporosis	Kathrine Fletcher (fletchk2)	Fletcher K.
Raguckas	Magnesium Sulfate in perinatal asphyxia	Stephanie Freed (freeds)	Freed
Coveyou	The role of Xarelto (rivaroxaban) in the prevention of thromboembolic disease	Katie Georges (georgek1)	Georges
Van Loo	The use of statins in the therapy of multiple sclerosis	Nicholas Greiner (greinen1)	Greiner
Koski	Is ramelteon effective for sleep maintenance in patients with insomnia?	Erica Harbin (harbine)	Harbin
Van Loo	Are the Angiotensin Receptor Blockers effective in preventing cognitive decline in hypertensive patients?	Matthew Harrison (harrim12)	Harrison
Nienhuis	Efficacy of vaccination for pseudomonas aeruginosa	Daniel Hedgecock (hedgcd)	Hedgecock
Raguckas	Is ginkgo biloba effective for the prevention or treatment of dementia	Melissa Hill (hillm21)	Hill M.
Bouthillier	Role of CoQ10 in reduction of adverse events associated with statin therapy	Chad Huizinga (huizinc)	Huizinga
Nienhuis	Ceftobiprole for the treatment of skin and soft tissue infections	Mark Jurgens (jurgesm)	Jurgens
Klepser	Is Peramivir effective for treating patients with H1N1?	Christopher Kirkpatrick (kirkpac)	Kirkpatrick
Klepser	Is the new antibiotic telavancin effective for treating skin & skin structure infections resistant to other current therapies?	Zachary Kirschner (kirschz)	Kirschner
Smith	Should propoxyphene be taken off the market in the U.S by reason of its efficacy and safety?	Kenneth Knauf (knaufk)	Knauf
Bernknopf	The use of topiramate in the treatment of binge-eating disorder	Stacey Kovalick (kovalos)	Kovalick
VandenBussche	The role of sleep aids in treatment induced insomnia in ADHD diagnosed children	Melissa Kwaiser (kwaisem)	Kwaiser
Rowley	Increased Malignancies and the Use of Insulin Glargine in Type 2 Diabetics	Julie Lewandowski (lewandj2)	Lewandowski

Student Topics and Schedule  
January - March 2011

Faculty	Topic	Full Name and WebCT ID	Last Name
Schulz	Should gabapentin be used to treat hot flashes in post menopausal women	Adam Lucas (lucasa2)	Lucas
Ross	Evaluating the Efficacy of Coenzyme Q10 in the Prevention of Migraine Headaches	Katharine Mancroni (mancrok)	Mancroni
Hagerman	Do the risks of long-acting beta agonists outweigh the benefits for the management of asthma?	Benson Meek (meekb1)	Meek
Smith	The Efficacy of Montelukast in the Treatment of Cystic Fibrosis	Stephen Mueller (muelles2)	Mueller
Coveyou	The use of Statins for Rheumatoid Arthritis	Phuong Nguyen (nguyenp5)	Nguyen
Koski	What is the role of Rufinamide in patients with epilepsy?	Xiaozhou Ning (ningx)	Ning
Saadeh	Should pomalidomide be used in the treatment of multiple myeloma?	Ryan Nolan (nola6)	Nolan
DeHoag	Is spironolactone an effective treatment for hirsutism?	Sarah O'Herron (oherrs)	O'Herron
Jameson	What is the best treatment option for women with gestational diabetes?	Jessica Olds (oldsj)	Olds
Morse	Weight loss as treatment of Sleep Apnea	Shanwa O'Shea (osheas)	O'Shea
Bailey	Hochu-ekki-to for atopic dermatitis	Inseo Park (parki)	Park
Klepser	Mono vs combination therapy for the treatment of candida or aspergillus infections	Adrian Ponik (Ponika)	Ponik
Hanson	Efficacy of Clomid (clomiphene) for male hypogonadism	Jason Popke (popkej)	Popke
Lee	The Role of Trabectedin in Soft Tissue Sarcoma	Kaitlyn Pninski (pninsk)	Pninski
Jameson	The use of liraglutide in treating type 2 diabetes mellitus	Lisa Ribbecky (ribeckl)	Ribbecky
Van Loo	steroid vs. steroid-antiviral combo in the treatment of bell's palsy	Enk Riutta (riut2)	Riutta
Saadeh	Tapentadol for Pain Management	Gemechis Roro (rorog)	Roro
Bakus	The use of horse chestnut (Aesculus hippocastanum) in the treatment of chronic venous insufficiency	Jane Schaefer (heslinj)	Schaefer
Hanson	Botox in the Treatment of Migraines	Laura Schalliol (schalll)	Schalliol
Bouthillier	Should we recommend a drug holiday from bisphosphonates?	Jessica Schoenherr (schoenj8)	Schoenherr
Bernknopf	The effectiveness and tolerability of memantine in children and adolescents diagnosed with autistic spectrum disorders	Patricia Scholz (scho65)	Scholz
Mersfelder	Use of acadesine in prevention of MI, stroke, and death following CABG surgery	Lindsey Selves (selvesl)	Selves
Coveyou	The Role of Dapagliflozin in the Treatment of Type II Diabetes	Charles Seskevics (seskevc)	Seskevics
Hagerman	Ticagrelor for antithrombosis	Brain Swank (swankb)	Swank
Mersfelder	Should acetylcysteine be used to prevent contrast-induced nephropathy	Edward Szymanski (szymane)	Szymanski
Raguckas	The role of thiazolidinedions such as pioglitazone and rosiglitazone in the treatment of Alzheimer's Disease	Amy Thompson (thomsoa)	Thompson
Saadeh	Use of oral bisphosphonates for prevention of skeletal complications associated with cancer and cancer treatment	Tiffany Town (townt1)	Town
Bailey	The use of bisphosphonates for the treatment of osteogenesis imperfecta in children	Angela Vanderberg (vander96)	Vanderberg
DeVoest	The use of Factor VII to control bleeding in trauma patients	Douglas VanStrien (vanstrd)	VanStrien
Koski	Incidence and clinical implications of the proton pump inhibitor/clopidogrel drug interaction	Kevin Walsh (walshk)	Walsh
Michels	Should Alemtuzumab be used in the treatment of Multiple Sclerosis?	Christopher Weeks (weeksc2)	Weeks
Schulz	the efficacy of lisinopril in migraines	Kathryn Wenzel (wenzelk1)	Wenzel
Mersfelder	milk thistle for alcoholic liver disorder	Andrew Wesolowski (wesoloa)	Wesolowski
Rowley	The Role of 5-Alpha Reductase Inhibitors in the Prevention of Prostate Cancer	Christopher Wolfinger (wolfinc1)	Wolfinger
Lee	Can Tipifamib be considered a safe and efficacious adjunctive therapy for breast cancer?	Amber Zychowski (zychowa)	Zychowski

June, 2010 data from the Pharmacy Manpower Project (available at [www.pharmacymanpower.com](http://www.pharmacymanpower.com)) show 20 of 50 states with moderate demand, 28 of 50 states with balanced demand and 2 of 50 states (Arizona, Nevada) with moderate surplus. Data from the [2010 Salary Survey](#) conducted by Drug Topics shows a “stable and well-paying field” with an average hour salary of \$55.06/hour and approximately two-thirds of respondents between an hourly wage of \$51 and \$60. Average annual salary for full-time pharmacists was approximately \$115,000.

As can be seen in the graph below, a significant number of graduates enter community practice; the second most common practice specialty is institutional practice. The remaining 15% of graduates enter a variety of practices including long-term care and managed care.

Employment information on recent graduates: (Source: Graduate and Alumni Surveys)

## B. Enrollment

The College of Pharmacy admits 150 student/year to the Doctor of Pharmacy program. Due the staffing intensity associated with the advanced pharmacy practice experiences, this number is not subject to increase at this time. Student credit hours and enrollment are shown in the table below. Enrollment and student credit hours are expected to remain stable. Fluctuations shown below are due the accelerator program, which from year-to-year results in some shifting of hours and enrollment from Fall to Summer. This shift is expected to stabilize with the discontinuation of the accelerator program with the class entering Fall, 2009.

	Fall, 2006	Fall, 2007	Fall, 2008	Fall, 2009
Student Credit Hours	7,318	7,815	7,994	8,500
Enrollment	515	542	546	557

Number of applicants and admits are shown below.

	2005	2006	2007	2008	2009	2010
Total Applicants	767	734	806	752	458	421
Qualified	566	499	615	464	269	242
Admitted	150	150	150	150	150	150

“Qualified” applicants include that that have completed all required pharmacy pre-requisites and have at the minimum required Pharmacy College Admission Test (PCAT) score. The decrease in applicants in 2009 and 2010 is due to the institution of a minimum PCAT score of 50<sup>th</sup> percentile for the class entering in Fall, 2009. In addition, with the implementation of the new curriculum in Fall, 2009 the accelerator program was discontinued. For the class entering Fall, 2011, the College of Pharmacy began participating in the Pharmacy College Application Service (PharmCAS). PharmCAS is a centralized application service that handles application, transcripts and PCAT scores for students. Over 90 of the 120 colleges of pharmacy currently participate in PharmCAS, including Wayne State University and University of Michigan. It is anticipated that PharmCAS will assist in expanding the breadth and diversity of the applicant pool. College of pharmacy applications are currently well above previous year numbers for this date.

### C. Program Capacity

The program is designed to admit and graduate 150 students annually. Physical facilities including laboratories, computer labs and classrooms are designed to accommodate 150 students of sections of 30-37 students. Off-campus facilities will accommodate a total of 150 students and experiential programming capacity is designed to support 150 students. Most importantly, the faculty capacity, both Pharmaceutical Science and Pharmacy Practice, is limited to 150 students. Further expansion of enrollment may well exceed didactic capacity within the first three professional years; in addition, clinical sites that provide students with an appropriate level of practice are limited in the non-metropolitan areas of the state.

### D. Retention and Graduation

The College of Pharmacy maintains an aggressive remediation program for students in the 1<sup>st</sup> and 2<sup>nd</sup> professional years, with most courses being offered again in the summer semester for students who have failed in the Fall and Spring semester. Attrition rates (and therefore graduate rates) remain quite stable over the past 5 years of the program (see table below). On-time graduation is estimated in light of the presence of the accelerator program. It is estimated that approximately 90-95%% of student who enter the program graduate on time (four-years for the four-year program). Graduation rates and on-time graduate rates are well within standards set by the accrediting organizations.

Entering Class Year (Admits)	Dismissal	Reinstated on Appeal	Reinstated and Progressing Successfully	Withdrawal	Total Attrition
2005 (150)	6	1	1	1	6 (4%)
2006 (150)	7	3	2	3	8 (5.3%)
2007 (150)	9	4	4	5	10 (6.6%)
2008 (150)	3	2	2	6	7 (4.7%)
2009 (150)	6	2	2	4	8 (5.3%)

### E. Access

The Doctor of Pharmacy program relies on a wide range of two- and four-year programs to provide candidates. To facilitate entry into the College, public and private institutions in Michigan are provided an updated guide to entry requirements based on the pre-pharmacy course equivalents found at the candidates' home institution. This effort by the College is augmented with routine contact with guidance counselors and frequent appearances at recruitment events around the state. As evidence of candidates accessibility to the program, among those admitted in the 2009 class, 60% were external candidates (i.e. completed pre-pharmacy requirements at an institution other than Ferris State University).

For candidates completing pre-pharmacy requirements at Ferris State University, the College has increased communications with informational nights scheduled in the fall semester which focus on admission requirements. (Candidates from outside the University are welcome to attend as well). The 'Honors Guarantee' that was previously offered to pre-pharmacy students meeting specific

academic standards, has been modified to comply with accreditation standards. Honors Students now are offered the 'Honors Assurance' which assures them of an interview providing the academic standards are met.

In the third year of the program, students are relocated to one of the College's off-campus instructional sites – Grand Rapids or Kalamazoo – in order to provide access to clinical placements not available in the Big Rapids area. It is uncertain if this off-campus option initially attracts candidates for the program. Similarly, in the fourth year of the program, Advanced Pharmacy Practice Experiences (APPEs) are conducted across the state; again, it is uncertain if this distributed network of clinical practice sites initially attracts students to the College.

Ensuring that internal and external candidates are informed of the College's entry requirements is essential to the College's goal of admitting a class with the highest academic qualifications. To that end, the admission process for the 2010-2011 year will be modified with all candidates required to apply utilizing a nationalized application system – PharmCAS (Pharmacy College Admission System). This will allow candidates to select from Ferris from over 90 participating colleges in a computerized process; increased applicant numbers are expected as a result of the College's participation and it is anticipated that the quality of applicants may be increased also.

Taken together, efforts by the College to ensure candidate access have been increased since the last APR through greater communication with applicants and increased access to the application process. In addition, revisions have been made to comply with accreditation standards including in-person interviews of all candidates and, as a result, modification of the 'honors assurance'. These efforts have provided an appropriate candidate pool despite significant growth in Doctor of Pharmacy programs throughout the country, including the Mid-west.

## **F. Curriculum**

For a complete listing of the 2009 Curriculum requirements refer to Appendix 10.2.

Since the last program review, the Accreditation Council for Pharmacy Education (ACPE) revised the Doctor of Pharmacy accreditation standards and guidelines. The standards were adopted in January 2006 and became effective July 2007 (referred to as Standards 2007). The previous standards were adopted in 1997 and mandated that the Doctor of Pharmacy degree become the sole professional practice degree in the United States. As a result of adoption of Standards 2007, Pharmacy schools or colleges evaluated by ACPE beginning in academic year 2007-2008 must comply with these standards and guidelines.

Standards 2007 place greater emphasis on the desired scientific foundation and practice competencies, the manner in which programs need to assess students' achievement of the curricular competencies, and the importance of the development of the student as a professional and lifelong learner. The 30 standards are organized into six sections, and now uniformly include the verb "must," indicating an absolute requirement for accreditation. Standards 2007 include guidelines to further define the standard and to assist colleges of pharmacy understand the breadth and scope of issues underlying the achievement of each standard. The guidelines employ the verb "must" where matters of quality assurance require that a standards-related issue be addressed in a specific manner. Guidelines employ the verb "should" where guidance or suggestions for quality improvement are provided. Use of the term "in general" recognizes that not all aspects of the subsequent list will apply in all situations. The specific standards that apply to curriculum are included in Addendum A of this document and the guidelines for science foundation in the curriculum are included in Addendum B of this document.



A Curriculum Revision Taskforce (CRTF) was charged by the Dean in 2007 to develop a new curriculum for the College that met Standards 2007. The credits in both the pre-pharmacy and pharmacy coursework were to remain unchanged. The initial step in the curricular revision process was a revision of the college's Ability Based Outcomes (ABOs). ABOs developed for the 2000 Curriculum served as a starting point for the 2009 curricular revision with several landmark documents, including Standards 2007's Appendix B, extensively reviewed and incorporated into the final 2009 Curricular ABOs (Appendix 9.1). The six categories of ABOs identified were patient-specific and population-based disease management, health promotion, systems management, communication, problem solving, and professionalism. In each category, three levels of performance are described (introduction, mastery and reinforcement) with supporting, detailed, outcomes listed; over 200 descriptions of outcomes are identified in the ABO document. This document served to guide the development of each course and the curriculum overall, as it represented a single, comprehensive listing of all ABOs considered by the CRTF as essential in the new curriculum.

Throughout the revision, courses were mapped against the tiered ABOs and Standards 2007's Appendix B elements. Mapping identified deficiencies in the 2000 Curriculum to be addressed in the 2009 curricular revision and assisted in the sequencing of coursework based on the level of the outcome. The CRTF identified five functional course categories, which served as the basis for curricular design: biomedical sciences (medical/molecular biochemistry and biotechnology), drug delivery (pharmaceutics and pharmacokinetics), drug action (pharmacology and medicinal chemistry), pharmacy practice management and health care delivery (practice management, pharmacoeconomics, sociopharmacy and pharmacy law), and patient-centered care (therapeutics, clinical communications, drug literature evaluation and research methods).

**Comparison of Standards 2007 Appendix B Elements and the 2009 Curriculum**

<u>Appendix B Elements</u>	<u>2009 Curriculum Course Categories</u>
Biomedical Sciences	Biomedical Sciences
Pharmaceutical Sciences	Drug Delivery, Drug Action
Social/Behavioral/Administrative Sciences	Pharmacy Practice Management and Health Care Delivery
Clinical Sciences	Patient-Centered Care

The revision of the curriculum was completed in three phases. In the first phase, the *pre-pharmacy* courses were reviewed, modified and implemented (Senate approved 3/07). Recognizing that the “2+4” curricular format admits students from a broad range of pre-pharmacy programs, the CRTF felt that the pre-pharmacy requirements must be established as a first step in the revision process to ensure all candidates were adequately prepared for the revised curriculum’s advanced course work. In addition, the CRTF felt it important that ample notification be provided to regional two- and four-year institutions to ensure that students could meet the revised pre-requisites.

Modifications in the pre-pharmacy requirements include; Statistics/biostatistics was deleted with content to be covered in P3 Study Design/Literature Evaluation course, Anatomy and Physiology were moved into the pre-pharmacy requirements with a Pathophysiology course sequence placed in P1. Microbiology was initially deleted from the pre-requisites and moved into the Infectious Disease courses. With further development of the Infectious Disease courses,

microbiology was returned as a pre-pharmacy requirement for candidates admitted in 2011 and thereafter.

In the second phase, the *required* professional courses were reviewed, updated and approved (Senate approved 12/08). The 2000 and 2009 Curricula were developed with attention to the pharmaceutical sciences serving as a foundation for applied sciences seen in P3 and P4. Biochemistry, Pharmaceutics/Drug Delivery, Anatomy/Physiology/Pathophysiology, and Integrated Lab/Practice Skills Labs are all components of P1 in both curricula. P2 emphasizes Medicinal Chemistry, Pharmacology (now combined in the Drug Action courses), Microbiology and Chemotherapeutic agents (now combined in the Infectious Disease courses), Pharmacokinetics, and Administrative Sciences. The clinical sciences are emphasized in P3 in both curricula with Study Design and Literature Evaluation, Pharmacotherapeutics, Pharmacoeconomics, Sociopharmacy and Pharmacy Law courses. To assist in integrating previous coursework, the 2009 Curriculum includes Integrated Case Studies, which will provide students with an opportunity to “bring together” components of the pharmaceutical sciences and clinical sciences in preparation for the P4 year, consisting of APPEs and the capstone Clinical Seminar course. This course will assess patient therapeutic planning, monitoring, communication, and drug literature skills. Sequencing of courses ensures that all pre-requisites are completed for each successive course. Remediation policies are currently under development; the College makes a significant effort to maintain students’ progress in the curriculum through summer remediation in the first two professional years of the program. In the P1 second semester, ENGL321 is required to meet the communication competency requirement. Specific sections for pharmacy students are scheduled with assignments designed to highlight the type of writing that students will encounter in the remainder of the curriculum. This alignment provides a foundation for the P3 PHPR540 Drug Literature Evaluation/Research Methods course as well as the Clinical Seminar course in P4. For students admitted to the College with a Bachelor’s degree or an advanced writing course, ENGL421 is required, ensuring that the competencies achieved in ENGL321 are achieved by all students regardless of their pre-pharmacy course work. Curricular changes are ongoing for the implementation of the 2009 curriculum. The prefix for all pharmacy courses were standardized to PHAR and many of the elective APPEs (advanced pharmacy practice experiential rotations) are currently being converted from PHPR. There are additional electives that are in the curriculum approval process. The prerequisites for many of the second semester courses are being updated to be compatible with available summer remediation to keep select students on track with their entering class where appropriate. In the 2000 curriculum, most of the P-2 classes were offered at an accelerated and regular pace (taught twice during a year). . Students took the P-2 sequence summer and fall (accelerated) or fall and spring. If a student failed a course, they would take it at the next available offering. The accelerated option was discontinued due to the changes in the accreditation requirements for earlier IPPEs (300 hours spread over the first 3 years, IPPEs scheduled in 3 week blocks in the summers after P-1 and P-2).

The experiential requirements in Standards 2007 were significantly increased. The introductory pharmacy practice experiences are not less than 5% of the curricular length (i.e. 300 hours) and advanced pharmacy practice experiences are not less than 25% of the curricular length (i.e. 1440 hours). Professional skills development is centered in the Practice Skills Labs sequence, P1 through P3, and introductory and advanced pharmacy practice experiences (IPPE; APPE). Course work in each year is structured to support the IPPE that follows, thus the IPPE serves as a ‘mile-marker’ for application of material presented in each year. The community-based IPPE following P1 emphasizes content in the areas of pharmaceutics, non-sterile compounding and non-prescription and herbal preparations; the institutional-based IPPE following P2 emphasizes drug action, the rudiments of clinical practice, and sterile compounding/intravenous admixture labs. Longitudinal patient-based IPPE’s are integrated into P2 and P3 to provide students with early

experience with chronic disease-states and their impact on patients, fostering the development of empathy as the student approaches APPE assignments. In the 2000 Curriculum, the Community IPPE was scheduled in either the Fall or Spring Semester of the P3 year with Institutional Practice assigned in the summer before or after P3. In both the 2000 and 2009 curriculums the community-based and institutional IPPEs were each 3 weeks (120 hours).

In both the 2000 and 2009 Curricula, P4 consists of APPEs and the capstone Clinical Seminar Course. Students apply the knowledge, skills and abilities gained in previous didactic and experiential coursework in the direct care of patients. Required APPEs in both curricula include: inpatient/acute care general medicine, ambulatory care and community pharmacy. Hospital/health-system pharmacy is an additional required APPE in the 2009 Curriculum (required by Standards 2007). Each curriculum provides three elective APPEs with experiences totaling eight months in the 2000 Curriculum and nine months in the 2009 Curriculum (meets APPE requirement of 1440 hours)

The third phase of the revision is in progress with elective courses being reviewed and approved. Didactic elective courses are listed in Appendix 10.3 and APPE electives are listed in Appendix 14.1.

As the curricular revision will not be fully implemented until the 2012-13 academic year, there are no plans for revision at this time although there will be modifications made based on ongoing curricular assessments. The 2009 Curriculum was designed to meet all elements of the 2007 Standards including: a minimum of four academic years, didactic course work to provide the desired scientific foundation, and required time for introductory and advanced pharmacy practice experiences. ACPE has made it clear that ongoing refinements to the 2007 Standards are to be expected that may require curricular modifications. It is unlikely that refinements would require the level of revision that was undertaken in the development of the 2009 Curriculum.

The Curriculum Committee has reinstated content surveys of all courses in the 2009 Curriculum. Students enrolled in the courses are provided the outline of the approved course (as developed by the CRTF) and asked to compare it with the courses as offered. That data is then summarized by the Curriculum Committee and provided to the course instructor for their review and comment. With the faculty comments, the Curriculum Committee then can make recommendations for modifications of course content to ensure that all content is covered and that duplication is avoided.

## **G. Quality of Instruction**

Quality of instruction is assessed annually through the AACP/ACPE Graduate Survey. This data provides the College with a complete assessment of students' perceptions of the program. Moreover, data obtained from graduates can be compared with national data collected from schools/colleges around the country. The 2008 and 2009 Graduate Surveys are included in a separate volume accompanying this document along with additional surveys conducted by the College.

A number of different pedagogical methods are being utilized as a component of classroom instruction in the College, in addition to traditional lecture. This includes case-based teaching, problem-based learning, game simulation, audience response system ("Clickers"), video patient case presentations, poster presentations, simulations, and self-directed learning (see examples in Appendices 11.1 and 11.2). There are also a number of technology applications utilized by the University and the College to assist in the delivery of course content and student assessment. The University currently employs Blackboard online course management system. Blackboard is utilized in varying degrees by faculty to enhance student communication through e-mail and online class discussion, dissemination of course/exam grades, content/learning module delivery, identification of

course goals and objectives, and online assessment. The University has also invested in the Tegrity system, which allows faculty to record classroom presentations with automatic upload to Blackboard. The Tegrity system provides students with asynchronous access to course material, including faculty-recorded supplemental materials.

Critical thinking and problem-solving skills are addressed in a number of ways in the classroom. Throughout the College, there is increasing development of, and emphasis on, the formation and application of problem-solving skills culminating in the advanced pharmacy practice experiences (APPE). Progressively more complex prescription simulations are used on a regular basis in Practice Skills Lab in P1 and P2 along with Clinical Communications. In P3 students are presented with relatively simple pharmacotherapy cases and required to identify problems and solutions from a pharmacy perspective. As the students progress through the year, the cases become more complex to continue the students' development in clinical problem solving. In the 2009 Curriculum the P3 Integrated Case Studies course is designed to integrate material from the first three years of the curriculum, in a format designed to best prepare students for P4. This course will assess patient therapeutic planning, monitoring, communication, and drug literature skills. The APPEs will challenge students with real-life clinical problems for which they must find solutions under the supervision of an experienced preceptor.

Over the past several years, there has been formalization of opportunities for students to develop and apply self-directed learning. In the P3 Pharmacotherapeutics course, student-directed learning modules (SDL) have been included on a weekly basis. In the SDLs, students were given a range of learning materials for which they were responsible to review on their own time to master specific material. The SDL's included components of self-assessment and opportunity to meet with the SDL instructor/developer for clarification of any questions about the material. Based on review of the students' use of these modules, there have been recent revisions to this process including a name change to Independent Study Modules (ISM).

In the Pharmacotherapeutics courses, student integration of basic and clinical sciences is assessed. Bi-weekly exams are required, each of which must be successfully completed in order to progress through the course. In addition, the student must successfully complete the capstone final exam with a satisfactory minimum score in order to progress. In the event a student does not achieve a passing score on the biweekly exams or the final exam, remediation exams are in place offering the student an incentive to review and learn the material and another opportunity to pass the specific section or final exam.

The Pharmacotherapeutics course sequence is delivered by synchronous distance-learning between Grand Rapids and Kalamazoo. A variety of creative methods such as case discussions are employed to engage students at both sites to achieve the outcomes of the courses. Student course evaluations and student focus groups conducted by the course coordinators have indicated that, in general, students feel that the distance technology, while not perfect, is a suitable approach to deliver the course content. Ongoing examination of student course outcomes between Grand Rapids and Kalamazoo indicate that achievement of outcomes is equal in the two locations. In addition, technology has been updated on an annual basis with replacement when warranted.

The College formally established a Professional Development Committee in 2007 to improve the coordination of College-wide faculty development. There is widespread encouragement from administrators and peers to transition from traditional lecture-based formats to more active teaching methods across the curriculum. In addition to College-based professional development opportunities, the University's Faculty Center for Teaching and Learning (FCTL) is available to all faculty. The FCTL supports faculty in continuous improvement of their teaching through numerous opportunities on a broad range of teaching topics throughout the year. Many, if not most, of the sessions sponsored by the FCTL promote the use of active learning techniques and

enhanced use of technology in the classroom, providing the faculty with many examples of diverse active teaching methods and technology advances. Evidence of the College's faculty's efforts in active learning comes from the *2008* and *2009 Graduate Surveys*. In the surveys, 87% (2008) and 90% (2009) of respondents SA/A that they were provided the opportunity to engage in active learning.

With the entering class of 2009, the College implemented the use of a student assessment portfolio. The portfolio project is intended to determine the types of assessments and activities which would be best supported through this medium. Due to the expense associated with a separate turnkey portfolio system, the College began this project using the existing Blackboard system. Activities related to the portfolio began in P1 with two reflective writing assignments (entrance to the College of Pharmacy; and key characteristics of a health care professional), and a mock patient counseling assignment (see Appendix 11.3). Students also conducted a self assessment of ability-based outcomes as part of the portfolio. Finally, curricular content evaluations for P1 were conducted utilizing the portfolio system. A complete review of curricular assessment activities, along with more information on the portfolio, is detailed in Standard 15.

The College has fostered an environment in which teaching innovation is supported and encouraged. Several faculty members have experimented with different teaching methods in many different courses. Some have employed games which challenge the students to compete with one another in a collegial fashion, motivating some students to put forth greater effort than in a less active and competitive environment. Other faculty use group participation exercises, examples or demonstrations, practice quizzes, out-of-class projects, or recitations to actively engage students. Faculty members evaluate these innovative activities through student feedback in order to obtain students' perceptions of the value and acceptability of these teaching methods. Those methods that are found to support achievement of course goals and objectives are continued; while those that do not are replaced by other methods.

Evidence for support of self-directed learning comes from surveys of the faculty, alumni, graduates, and preceptors. In the *2007 Faculty Survey*, 100% of the faculty indicated that they encourage their own students to assume responsibility for their learning. In the *2009 Faculty Survey*, 81% of the faculty SA/A that they encourage students to assume responsibility for their own learning. In the *2008 Alumni Survey*, 96% of respondents SA/A that they were encouraged to assume responsibility for their learning. In the *2008* and *2009 Graduate Surveys*, 89% and 83% of respondents respectively SA/A that they develop the skills needed for continued learning after graduation. Finally, in the *2007 Preceptor Survey*, 93.2% of respondents SA/A that students were willing to assume responsibility for their own learning at the preceptors' sites.

The College has continued to invest in the distance technology utilized for delivery of content on the Grand Rapids and Kalamazoo campuses. Since the last accreditation visit, all of the hardware and software has been replaced. In addition, the technology has been updated on an annual basis. Exam scores for distance courses are compared between the two sites and no significant difference has been found in outcomes between the two sites. Parity between the two sites is also demonstrated by the similarity in NAPLEX scores between students who participated in coursework at these two sites.

Faculty development activities have become more structured and coordinated under the direction of the College Professional Development Committee formed in 2007. Different programs and tracks have been developed to assist new, as well as tenured, faculty in teaching techniques, research and grant pursuit and tenure and promotion development.

## H. Composition and Quality of Faculty

### Pharmaceutical Science Faculty

Last name	First name	Rank	Degree / Additional training	Courses taught
				PHAR = 2009 Curriculum (PHPR/Other = 2000 Curriculum)
Dakkuri*	Adnan	Tenured, Professor	B.S. Pharmacy, Ph.D.	PHAR 318, 319, 462 (PHAR 325, 326, 456, 462)
Hancock	Kim	Tenured, Professor	B.S. Pharmacy, Ph.D.	PHAR 319, 428 (PHAR 326, 440; PHCH 330)
Hult	Richard	Tenured, Professor	B.S. Pharmacy, Ph.D.	PHAR 411, 412 (PHCL 423, 424, PHCH 330, PHPR 411, 412)
Krueger	Robert	Tenured, Professor	B.S. Pharmacy, Ph.D.	PHAR 340, 412, 421, 422, 452, 464 (PHCH 427, 428, 430, 523; PHCG 452, PHCG 462)
Lovested	Elsie	Tenured, Professor	B.S. Pharmacy, Ph.D.	PHAR: 411, 412, 414, 490 (PHCH 427, 428, 430, 462)
Potter	Gregory	Tenured, Professor	B.S. Pharmacy, Ph.D.	PHAR 315, 316, 411, 412, 413, 414, (PHCH 330; PHPR 411, 412; PHCL 423, 424, 462; OPTM 638)
Boncher	Tracey	Tenured, Associate Professor	Ph.D.	PHAR 311, 411, 412, 413 (PHCH 320, 330,427, 452; PHPR 411)
Ngoh	Lucy	Tenured, Associate Professor	B.S. Pharmacy, MHA, Ph.D.	PHAR: 334, 450, 457, 491 (SOCY 373; PHAD: 310, 482, 484, 502)
Bates	Jeffrey	Tenured, Assistant Professor	B.S. Pharmacy, PharmD  CGP -- Commission for Certification in Geriatric Pharmacy	PHAR 334, 335, 340, 470 (PHAD 310; PHPR 411, 412, 472)
Bennett	David	Non-Tenured, Assistant Professor	B.S. Pharmacy, Ph.D., MSA	PHAR 525, 535 (PHAD: 436, 502)
Miskimins Mills	Beth	Non-Tenured, Assistant Professor	Ph.D.	PHAR 311, 312. 413
McMullen	Kenneth	Instructor	BIS, B.S. Pharmacy	PHAR 328, 385, 386 (PHPR 303, 304)

### Pharmacy Practice Faculty

Last name	First name	Rank	Degree Additional training	Practice Site, City <b>APPE Experience(s)</b> [E = Elective] Courses taught PHAR = 2009 Curriculum (PHPR/Other = 2000 Curriculum)
Bailey	Teresa	Tenured, Prof.	B.S. Pharmacy, Pharm.D. Pharmacy Practice Residency, Family Practice Residency	ProMed Family Practice, Portage <b>Ambulatory Care PHAR: 602, 603</b> <b>(PHPR 602, 603)</b> PHAR: 511, 512, 513, 514, 335, 680 (PHPR 514, 521, 522, 523, 524, 680) PHCG 432
DeHoag	Cambria	Tenured, Prof.	Pharm.D. Pharmacy Practice Residency	G-500 MERC, Grand Rapids <b>Experiential Coordinator</b> PHAR 511, 512, 513, 514, 585, 586, 680 (PHPR 501, 502, 514, 521, 522, 523, 524, 680)
Jameson	John	Tenured, Prof.	B.S. Pharmacy Pharm.D. BCPS	Wege Center, Grand Rapids <b>Ambulatory Care PHAR 602, 603 (PHPR</b> <b>602, 603)</b> PHAR 334, 335, 511, 512, 513, 514, 680 (PHPR 514, 521, 522, 523, 524, 680; PHAD 310)
Klepser	Michael	Tenured, Prof.	Pharm.D. Pharmacy Pracice Residency, Fellowship (ID)	FSU COP Spindler Hall, Kalamazoo <b>Academic Pharmacy Experience PHAR</b> <b>605 (PHPR 605)</b> PHAR 513, 556, 680 (PHPR 523, 556, 680)
Koski	Renee	Tenured, Prof.	B.S. Pharmacy, Pharm.D. Pharmacy Practice Residency CACP	UPHEC, Marquette <b>Ambulatory Care PHAR 602, 603 (PHPR</b> <b>602, 603)</b> PHAR 511, 512, 513, 514, 585, 586, 680 (PHPR 501, 502, 521, 522, 523, 524, 680)
Ross	Mary Frances	Tenured, Prof.	B.S. Pharmacy, Pharm.D., Pharmacy Practice Residency	Family Health Center, Kalamazoo <b>Ambulatory Care PHAR 602, 603 (PHPR</b> <b>602, 603)</b> PHAR 680 (PHPR 514, PHPR 680)
Smith	Curtis	Tenured, Prof.	B.S. Pharmacy, Pharm.D., Fellowship (Pharmacokinetics), BCPS	Sparrow Health System, Lansing <b>Internal Medicine, Clinical</b> <b>Pharmacokinetics [E], Trauma Care [E],</b> <b>Critical Care [E] PHAR 600, 601, 604,</b> <b>623, 624 (PHPR 600, 601, 604, 623, 624)</b> PHAR 511, 513, 585, 586, 680 (PHPR 501,

				502, 514, 521, 523, 680)
Straley	Craig	Tenured, Prof.	B.S. Pharmacy, Pharm.D. Fellowship (Psychiatry), BCPP	VA Medical Center, Battle Creek <b>Psychiatry [E] PHAR 640 (PHPR 640)</b> PHAR 511, 585, 680 (PHPR 501, 514, 521, 680)
VandenBussche	Heather	Tenured, Prof.	Pharm.D. Pharmacy Practice Residency, Pediatric Residency	Bronson Methodist Hospital, Kalamazoo <b>Pediatric Medicine [E] PHAR 608 (PHPR 608)</b> PHAR 513, 514, 586, 680 (PHPR 502, 523, 524, 556, 582, 680)
Bernknopf	Allison	Tenured, Assoc. Prof.	Pharm.D. Drug Information Residency BCPS	MSU/KCMS, Kalamazoo <b>Drug Information [E] PHAR 606 (PHPR 606)</b> PHAR 540, 680 (PHPR 550, 680)
Bouthillier*	Michael	Non-Tenured, Assoc. Prof.	B.S. Pharmacy, Pharm.D. Pharmacy Practice Residency	Spectrum Health Academic Medical Association, Grand Rapids <b>Ambulatory Care PHAR 602, 603 (PHPR 602, 603)</b> PHAR: 335, 511, 512, 585, 586, 680 (PHPR: 501, 502, 514, 521, 522, 680) PHAD 310
De Voest (0.6 FTE)	Margaret	Tenured, Assoc. Prof.	Pharm.D. Pharmacy Practice Residency	Spectrum Health Butterwort Campus, Grand Rapids <b>Internal Medicine PHAR 600, 601 (PHPR 600, 601)</b> PHAR 585, 576, 680 (PHPR 501, 576, 680)
Hagerman	Jennifer	Tenured, Assoc. Prof.	Pharm.D. Pharmacy Practice Residency AE-C	Hurley Medical Center, Flint <b>Internal Medicine PHAR 600, 601 (PHPR 600, 601)</b> PHAR 511, 512, 513, 514, 585, 586, 680 (PHPR 501, 502, 521, 522, 523, 524, 680)
Lee	Stephen	Tenured, Assoc. Prof.	M.S. Pharmacology, Pharm.D., Pharmacy Practice Residency	St. Mary's Healthcare, Grand Rapids <b>Internal Medicine PHAR 600, 601 (PHPR 600, 601)</b> <b>Infectious Disease PHAR 648 (PHPR648)</b> <b>Special Topics Inpatient Medicine [E] PHAR 650 (PHPR 650)</b> PHAR 315, 316, 511, 512, 513, 514, 585, 586, 680 (PHPR 501, 502, 521, 522, 523, 524, 680)
Mersfelder	Tracey	Tenured, Assoc. Prof.	B.S. Pharmacy, Pharm.D., Pharmacy Practice	Borgess Medical Center, Kalamazoo <b>Internal Medicine PHAR 600, 601 (PHPR 600, 601)</b>



			Residency, Internal Medicine Residency, BCPS	PHAR 511, 512, 513, 514, 585, 586, 680 (PHPR 501, 502, 521, 522, 523, 524, 680)
Neinhuis (0.5 FTE)	Marc	Tenured, Assoc. Prof.	B.S. Pharmacy, Pharm.D.	Bay Regional Medical Center, Bay City <b>Internal Medicine PHAR 600, 601 (PHPR 600, 601)</b> PHAR 511, 512, 513, 514, 585, 586, 680 (PHPR 501, 502, 521, 522, 523, 524, 680)
Raguckas	Sarah	Tenured, Assoc. Prof.	B.S. Biomedical Science, Pharm.D. Pharmacy Practice Residency	Michigan Medical. PC, Grand Rapids <b>Ambulatory Care PHAR 602, 603 (PHPR 602, 603)</b> PHAR 385, 554, 680 (PHPR 554, 562, 680)
Saadeh	Claire	Tenured, Assoc. Prof.	B.S. Pharmacy, Pharm.D. Pharmacy Practice Residency, Oncology Residency, BCOP	Sparrow Health System, Lansing <b>Pain Management [E], Oncology [E] PHAR 619, 652 (PHPR 619, 652)</b> PHAR 511, 513, 585, 586, 680 (PHPR 501, 502, 521, 523, 558, 680)
Thill	Paul	Tenured, Assoc. Prof.	Pharm.D. Pharmacy Practice Residency	Covenant Health Care, Saginaw <b>Internal Medicine PHAR 600, 601 (PHPR 600, 601)</b> PHAR 511, 512, 585, 586, 680 (PHPR 501, 502, 521, 522, 582, 680)
Van Loo	Dean	Tenured, Assoc. Prof.	Pharm.D. Pharmacy Practice Residency	Bronson Methodist Hospital, Kalamazoo <b>Internal Medicine, Infectious Disease [E], Academic Pharmacy Experience[E] PHAR 600, 601, 648, 605 (PHPR 600, 601, 648, 605)</b> PHAR 385, 511, 512, 513, 514, 585, 576, 680 (PHPR 501, 502, 521, 522, 523, 524, 680)
Covyeou	Jill	Non-Tenured, Assist. Prof.	Pharm.D. Pharmacy Practice Residency	Family & Child Health Clinic, Essexville <b>Ambulatory Care PHAR 602, 603 (PHPR 602, 603)</b> PHAR 511, 512, 513, 514, 585, 586, 680 (PHPR 501, 502, 521, 522, 523, 524, 680)
Elder	Jodie	Non-Tenured, Assist. Prof.	Pharm.D. Pharmacy Practice Residency BCPS	Metro Health Breton, Grand Rapids <b>Ambulatory Care PHAR 602, 603 (PHPR 602, 603)</b> PHAR 513, 586, 680 (PHPR 502, 523, 680)
Hanson	Kierstan	Non-Tenured, Assist.	B.A. Physiology, Pharm.D. Pharmacy Practice	MSU Clinical Center, East Lansing <b>Ambulatory Care PHAR 602, 603 (PHPR 602, 603)</b>

		Prof.	Residency BCPS	PHAR 511, 512, 513, 514, 585, 586, 680 (PHPR 510, 502, 521, 522, 523, 524, 680)
Meny	Lisa	Non-tenured, Assist. Prof.	Pharm.D. Pharmacy Practice Residency – Community Practice	G-500 MERC, Grand Rapids <b>IPPE Coordinator PHAR 625 (PHPR 625)</b> PHAR 554, 680 (PHPR 554, 680)
Morse (0.5 FTE)	Jacqueline	Non-tenured, Assist. Prof.	Pharm.D. Pharmacy Practice Residency - Community Practice, BCPS	G-500 MERC, Grand Rapids <b>Community Pharmacy PHAR 611 (PHPR 611)</b> PHAR 334, 335, 349, 566, (PHPR 501, 502, 524, 680 PHAD 310)
Rowley	Kristina	Non-tenured, Assist. Prof.	Pharm.D. Pharmacy Practice Residency, Ambulatory Care Residency, CDE	MSU/KCMS, Kalamazoo <b>Ambulatory Care PHAR 602, 603 (PHPR 602, 603)</b> PHAR 511, 512, 513, 514, 585, 586, 680 (PHPR 501, 502, 521, 522, 523, 524, 680)
Schulz	Kali	Non-Tenured, Assist. Prof.	Pharm.D. Pharmacy Practice Residency, BCPS	Saint Mary's Health Care, Grand Rapids <b>Internal Medicine PHAR 600, 601 (PHPR 600, 601)</b> PHAR 513, 514, 585, 586, 680 (PHPR 501, 502, 514, 523, 524, 556, 680)
Campbell	Sandra	Adjunct – Contractual**	Pharm.D.	Sparrow Family Practice Clinic Lansing <b>Ambulatory Care PHAR 602, 603 (PHPR 602, 603)</b> PHAR 511, 512, 513, 514, 585, 586, 680 (PHPR 501, 502, 521, 522, 523, 524, 680)

\*Dual role as Department Chair

\*\*Service contract with Michigan State University Clinical Center

### Administration

Last name	First name	Location	Degree, Additional Training, Area or responsibility
Baran	Rose	Grand Rapids	B.S. Pharmacy, M.A. Business Admin Practicum Director
Durst	Stephen	Kalamazoo /Grand Rapids	B.S. Pharmacy, Pharm.D. Associate Dean
Mathison	Ian	Big Rapids	B.Pharm., Ph.D., D.Sc. Dean
Wellman	Gregory	Big Rapids	B.S. Biology; B.S. Pharmacy, M.S. Hospital Pharmacy, PhD Pharmacy Administration; Residency in Hospital Pharmacy Assistant Dean of Student Affairs & Assessment

### Support Staff

Last name	First name	Location	Degree, Additional Training, Area or responsibility
Jorgenson	Emily	Kalamazoo	A.S. Dental Technology B.S. Recreation Management and Leisure Services Administrative Assistant
Lee	Tara	Big Rapids	B.S. Business Admin. Administrative Specialist-Admissions
Lyons	Margaret	Grand Rapids/Kalamazoo	M.A. College Counseling, L.P.C. Director of Off-Campus Student Services
Maguire	Patricia	Big Rapids	B.S. Accountancy CPA Account Clerk
Ruggles	Andrea	Big Rapids	A.S. Pre-Teaching/Paralegal Administrative Specialist-Continuing Education
Saunders	Melissa	Big Rapids	Clerical
Seiferlein	Mandy	Grand Rapids	B.A., M.P.A. Health Care Admin. Director of External Clinical Operations
Wiese	Terry	Grand Rapids	Administrative Assistant

### Information Technology (IT) Support

Last name	First name	Location	Area or responsibility
Flowers (0.5 FTE)	Tony	Grand Rapids	IT Support
Mishler	Russell	Big Rapids	IT Support
Pavlov (0.2 FTE)	Velislav	Grand Rapids	IT Support
Todd (0.5 FTE)	David	Kalamazoo	IT Support

### Open Faculty Positions

Position Number	FTE	Status (as of July 1, 2010)
21537	1.0	Posted - Practice Skills Lab III & IV; Social and Administrative Sciences (Pharmaceutical Sciences)
21560	1.0	To be posted (open 6/1/10) (Pharmacy Practice)
21504	1.0	Posted - General Adult Medicine (Pharmacy Practice)
21516	1.0	Posted – General Adult Medicine (Pharmacy Practice)
21540	1.0	To be posted – General Adult Medicine (Pharmacy Practice)
21507	1.0	Practicum Director – to be reassigned from temporary position (Pharmacy Practice)
21512	1.0	Contractually filled with adjunct; Ambulatory Medicine (Pharmacy Practice)

(Additional faculty data available in Addendum D of this document)

As of July 1, 2010, the College has 57.6 FTE paid faculty, staff, and administrators categorized as follows: 44.6 FTE faculty (tenured or tenure-track), 8.0 FTE administration (3.0 FTE/administrative staff +5.0 FTE), 4.0 FTE clerical and 1.0 FTE currently classified as temporary (practicum director) that will be eliminated and placed in the faculty category in summer, 2010. Supplemental faculty funding equates to an additional 5.4 FTE for a total College roster of 50.0 FTE Faculty (See above). Complementing the College's faculty and staff is an adjunct faculty of over 300 members that contribute to the College's mission through varying degrees of didactic and experiential support (see Appendix 24.2). Students, faculty, staff and administration are supported by approximately 1.5 FTE in information technology. Faculty within the Pharmaceutical Science and Pharmacy Practice departments number 38.6 FTE with six open positions. Currently, one of the open positions is used to fund a contractual arrangement with the Michigan State University Clinical Center for full-time preceptorship of students in an MSU/Sparrow Hospital Family Practice Clinic. A second position is currently committed to the appointment of a temporary, full-time employee (mentioned above) to a tenure-track faculty appointment.

Calculation of the Student:Faculty Ratio (SFR) for the program can be done in a variety of ways based on the faculty numbers used. With a total faculty, tenured/tenure-track/supplemental of 50.0 FTE and a fall 2009 enrollment of 604 students, the SFT is 12.1. When total faculty FTE's are used for calculation (44.6), an SFR of 13.5 results; when open positions are removed from the total faculty numbers (total 38.6 FTE), the SFR increases to 15.6. Mitigating this elevated SFR is the efficient use of the 5.4 FTE in supplemental faculty funding. This funding provides support for didactic and experiential education, reducing the impact of the elevated SFT as a result of open faculty positions. A substantial portion of the supplemental faculty funding is used for APPE placements to ensure that students receive an appropriate level of guidance and mentoring. The student:preceptor ratio for IPPEs is  $\leq 2$  to 1 and the APPEs student:preceptor ratio is  $\leq 4$  to 1. Based on the *2009 Graduate Survey*, the student:preceptor ratio on IPPEs and APPEs is acceptable with 86.2% SA/A.

As seen in faculty listing above, all faculty members are highly qualified for their respective positions. The majority of Pharmaceutical Sciences faculty members have completed a baccalaureate degree in pharmacy prior to graduate studies; in addition, the majority of pharmacy practice faculty members have completed a PGY-1 residency, PGY-2 specialty residency, or fellowship program and many have achieved advanced certifications such as CGP, BCPS, CACP, and BCOP.

The College continues to actively recruit qualified faculty members to fill open positions in a very challenging recruitment environment. Faculty resources, turnover rates, and replacement information by department can be seen in Appendices 24.3 and 24.4. The majority of faculty departures were due to career advancement opportunities within academic pharmacy. Recruitment for the College is headed by the Dean and Associate Dean of the College with support by the Department Chairs and faculty members. The college devotes substantial resources to assist in filling positions with the best applicants available. Efforts to enhance faculty recruitment and retention have focused on securing a competitive salary structure for all faculty members, maintaining support for annual travel and increased faculty development and mentoring through a more formalized process.

The College's off-campus instructional sites are supported by an administrative assistant at each location, complementing the Dean's Office and Pharmaceutical Sciences department staff on campus. At the off-campus sites, administrative assistants are responsible for all daily operations providing support to students and faculty members with teaching responsibilities at the off-campus sites. They play a role in a wide range of activities, from assisting in the delivery and maintenance of the College's distance learning system to performing administrative duties that relieve the Associate

Dean of routine administrative issues. IT technicians are also available at each off-campus site through contractual agreements with the Kalamazoo Center for Medical Studies (KCMS) and the Grand Rapids Medical Educational Partners (GRMEP), providing computer and distance learning support as well as maintenance of computer labs at each site. The Dean's office operations are supported with three clerical and one administrative assistant position. An additional clerical position supports the Pharmaceutical Sciences department. In the *2009 AACP/ACPE Faculty Survey*, 52.3% of respondents SA/A with the statement, "I receive adequate support staff resources," this reflects a decline from the 2007 survey in which 73.3% SA/A with the same statement. One part-time Ferris State University student assistant is employed to assist in the clerical tasks of the Dean's Office. This student position contributes approximately 10-14 hours per week of support. The campus also provides IT support personnel to assist with issues that cannot be handled by off-campus support staff.

In the *2009 AACP/ACPE Faculty Survey*, 33% SA/A that there is a sufficient number of qualified faculty members to teach the College's curriculum. In 2007, 26.6% of faculty SA/A with the same statement. However, when looking at time allocated for teaching, research and service, approximately 75% of faculty reporting SA/A that the expectations are appropriate (more specifically: teaching: 85.7% SA/A, Research: 55% SA/A, Service: 85.7% SA/A, and Clinical Service: 72.2% SA/A).

Many efforts have been devoted to enhancing faculty recruitment and retention; recent faculty salary adjustments, primarily focusing on the assistant and associate professor rank, are the most visible. As a result, salaries for most faculty members have been adjusted to that comparable to the 25<sup>th</sup> to 50<sup>th</sup> percentile in the *AACP Survey of Faculty*. To supplement these efforts, the College formalized its professional development efforts through the appointment of a formal Professional Development Committee in 2007. There are also several grant opportunities widely offered at the university and college levels to supplement travel and professional development activities (see Standard 26). The Dean has consistently worked at the University level to protect and maintain the COP budget, avoiding many of the necessary University-wide reductions. In addition, educational leave, consulting time, and travel reimbursement have remained intact.

Recruitment efforts are ongoing to fill open faculty positions with qualified candidates in a competitive recruitment environment and a depressed economic climate in the State of Michigan. The SFR for the College is substantially elevated when open positions are removed from the calculation and brought into appropriate range only with the inclusion of supplemental faculty support. Continued budgetary support for the supplemental faculty is essential in maintaining a qualified faculty. The 2009 appointment of department chairs is intended to increase support for recruitment in both departments. Pharmaceutical Sciences faculty efforts to complete a workload policy are underway with anticipated completion in fall, 2010. This will reduce the concerns within the department and lead to more equitable distribution of teaching responsibilities. Overall, quantitative factors within the College must be continually evaluated as implementation of the 2009 Curriculum continues.

Full-time faculty members have the appropriate education and training to contribute to the professional degree program. Verification of education and training credentials of employees is performed via reference checks prior to appointment. A list of faculty and staff and their educational credentials is found in Addendum B of this document. All faculty members with practice responsibilities are licensed to practice pharmacy in the State of Michigan. The faculty represents disciplines within the biomedical, pharmaceutical, social/behavioral/administrative, and clinical sciences. Teaching assignments are based on expertise in a given area gained by professional degree, graduate degree, post-graduate experiences, and practice experiences. To assure that teaching needs are met by faculty with expertise in any given area, the focus of the College's recruitment and

retention efforts is centered on meeting the needs of the curriculum; candidates must also demonstrate a commitment to teaching. The *College Mission Statement* identifies pursuit of research and service as a means of enhancing instruction within the curriculum.

In addition to the qualifications outlined above, several practice faculty members have specialty certification relevant to their practice. All faculty members show evidence of scholarship and publication in their respective disciplines. (A full listing of faculty accomplishments will be available on site.)

Tenure policies for each department are provided as appendices (see Appendix 25.1 and 25.2). As part of the policy, the criteria for attainment of tenure is based, in part, on assigned professional responsibilities (i.e., teaching, advising), professional development (i.e., research, scholarship, creative endeavors, consulting), and service (i.e. to FSU and/or College committees, the profession, the community). Non-tenured faculty members are evaluated annually by their candidate evaluation team (CET), consisting of two tenured faculty whose function is to assist the new faculty member in his/her progression toward attainment of tenure. Tenured faculty members are formally evaluated every five years as outlined in the contractual post-tenure policy (see Appendix 25.3).

A key factor in faculty retention is a strong, comprehensive, professional development program that begins with the appointment. All new faculty and staff are required to attend the campus orientation led by Human Resources as well as the New Faculty Orientation program offered through the Faculty Center for Teaching & Learning (FCTL). The College also has a faculty checklist to ensure that items such as policies and procedures, travel, setting up office, computer training, etc. are completed and discussed with the respective department chair and the DECO. Informally, the College faculty is professionally and socially supportive of new members. The departments often host informal social opportunities to allow new faculty members to get to know the current members of the faculty. In an effort to help new faculty get acquainted, various social outings are encouraged. Acquainting new faculty members with their assigned city and region is an important aspect of a successful transition into academia.

An increasing level of emphasis is placed on scholarly activity within both college departments (see Appendix 25.4). The Promotion and Merit committee routinely assesses the level of scholarly activity demonstrated in a promotion portfolio. Faculty reviews and post-tenure reviews commonly make reference to the level of scholarly activity demonstrated although quantitative requirements have not been established. Professional development programming promotes the faculty members' ability to engage in scholarly activity. These efforts have resulted in modest increases in external funding as well as an increased level of scholarly activity as evidenced by publications, presentations and pedagogical research and innovation. Yet it is recognized that there is a need to address the quantity as well as the quality of scholarly activity while maintaining a balance with the significant teaching commitment that is required of all faculty members.

The majority of the State's community pharmacists are alumni of the College as is a large portion of the State's institutional pharmacists. It is primarily through its alumni and individual efforts of faculty members that the College influences and directs the evolution of the profession. Many faculty members and alumni hold positions of leadership in national, regional and state professional organizations and advisory boards. Faculty members have or are developing a conceptual understanding of current and future pharmacy practice models, but this must be expanded, particularly for non-practice faculty members. Additionally, through placement of Pharmacy Practice faculty at selected clinical sites throughout the state, there has been a significant augmentation of clinical services developed by the College. More recent efforts to assist in the development of Pharmacy Practice Residencies are also a significant contribution to advancing practice standards. The College encourages faculty members to serve in leadership roles within the

profession as evidenced by faculty serving in elected and appointed leadership offices in a variety of professional organizations.

The College has been extensively involved in the development and support of a Pharmacy Practice Residency with emphasis in Community Practice. The program is jointly accredited by the APhA and ASHP and is a unique collaboration between Meijer Pharmacy, Pfizer and the College. In addition, Pharmacy Practice faculty members are integrally involved in PGY-1 residency programs affiliated with practice sites including Bronson Methodist Hospital, Borgess Medical Center, Sparrow Health System, and Spectrum Health-Butterworth.

Faculty members are highly engaged in the promotion of the profession through service. The College faculty provide service to the College, University, profession, and community. Within the College, faculty members are engaged in the governance of the University and the College through membership in standing committees and participation in *ad hoc* and department committees. The faculty members not only are active members but also serve in a variety of leadership roles to advance the profession and mission of the College.

Recognizing the significant increase in new faculty members within the College, professional development programming has been enhanced since the last accreditation visit to develop pedagogical as well as research skills. In the 2007 and 2009 *AACP/ACPE Faculty Surveys*, 100% and 95% of respondents SA/A with the statement “programs are available to me to improve my teaching and to facilitate students learning.”

The faculty’s interest in pedagogical issues and knowledge regarding learning theory is demonstrated through the continued efforts to introduce active learning into the curriculum. This sustained effort began as collaboration with the University’s Academic Affairs office under the title of “accelerated learning” and included an external instructional designer. Several groups of faculty members met with the instructional designer in a variety of workshops aimed at developing an understanding of active learning principles and applying them to the pharmacy curriculum. Elements of active learning have been incorporated into several courses, including a significant revision of the Pharmacokinetics course (PHAR440). These efforts have been further augmented with the recent AACP Institute on active learning attended by a six-member team from the College.

The College must explore methods to encourage and facilitate scholarly activity, taking ideas from other “teaching intensive” institutions. This will contribute to faculty retention and bring recognition to the faculty members. To support increased basic science research, equipment within the College must be updated. In the 2007 and 2009 *AACP/ACPE Faculty Surveys*, 60% and 53.3% of faculty, respectively, SA/A that programs are available for developing competence in research. Reactivation of the research-based “Honors Track” for students would provide incentive for both students and faculty to collaborate in research/scholarship. A more comprehensive and pragmatic approach to fostering research within the College must be developed through dialog between faculty and College administration.

Adequate resources are available for clinical research and the wide array of faculty practices provide support for several types of clinical research (community based, ambulatory care, inpatient). Collaboration among faculty within the College is challenging due to the distributed nature of practice and instructional sites. Attempts have been made to bridge this gap through research collaboration/meeting groups which have since been cancelled; however, professional development sessions continue to focus on research skills and grant writing abilities. Enhanced collaboration and understanding between junior and senior faculty and between departments is needed. According to the 2007 and 2009 *AACP/ACPE Faculty Surveys* only 30% and 33.4% of the faculty SA/A that programs are available for non-practice faculty to orient to the pharmacy profession and education.

Workload in the College is widely varied, particularly when compared between the two departments. The Pharmaceutical Sciences Department is in the process of development of a



workload policy that will serve as a standard for department members. Based on the 2009 Curriculum revision, an equalized workload for each department member would be approximately five credits of coursework. This does not include elective offerings or involvement in the College's extensive remediation program. It is anticipated that the policy will be completed in the Fall, 2010, semester. The Pharmacy Practice Department has been working under a Department policy for several years that specifies didactic and experiential responsibilities. Faculty are assigned 24-hours of didactic (or laboratory) instruction annually. This is complemented by 30-32 "clerkship months" during the year. Open faculty positions within the department have resulted in frequent overload hours for most faculty members. In both departments, faculty members are responsible for College and University committee assignments, organization advising, and student advising.

Release time has been granted to the Department Chairs approximately equal to 25% of their workload. Additionally, the chair of the faculty development committee has been granted a reduction in experiential student assignment to develop a comprehensive professional development program.

Recruitment in both departments is coordinated by the Chair, with faculty participating based on specialty group and geographic location. Typical requirements in the Pharmaceutical Sciences Department consist of a Ph.D. in the posted specialty area (ex: medicinal chemistry, pharmacology) or related areas; post-doctoral training or teaching experience is not required. In the Pharmacy Practice Department, a Doctor of Pharmacy degree is required with a post-graduate residency or equivalent experience; teaching experience is not required but is encouraged. As a result of the significant growth in schools/colleges of pharmacy, recruitment has been challenging for both departments. This has resulted in significant delays in appointments with faculty overloads and increased use of adjunct faculty for experiential clerkships.

The College makes a significant effort to recruit a faculty of diversity through national postings of all open positions. In addition, Pharmacy Practice recruitment includes preliminary interviews annually at a national placement service with diverse candidates identified and contacted.

The Professional Development program and additional faculty and staff development opportunities are a notable strength of the College. The Professional Development Committee was formalized in 2007; prior to that, faculty development sessions had been conducted on a regular schedule since 2003 (Appendix 26.1). A more formalized professional development program was established for 2009-2010 with the goals of developing and mentoring new faculty and providing seasoned faculty with development opportunities (Appendix 26.2). Sessions for the 2009-10 academic year were held twice a month for new faculty and focused on their transition into academia and initial development of their teaching skills. In January, 2010, the sessions moved to once-a-month, focusing on scholarly and professional activities. All College faculty and administrators are invited to attend any of the sessions offered. The Professional Development Committee also works closely with FSU's Faculty Center for Teaching and Learning (FCTL). The Director of the FCTL assists the Professional Development Committee with program development and evaluation, the New Faculty Transitions program (offered as an optional orientation for all FSU new faculty), and identification of potential speakers outside of the College to facilitate some of the sessions.

During the 2008-09 academic year, a focus was placed on enhancing the use of Accelerated Learning in teaching activities and an instructional design consultant was identified to assist faculty to enhance their knowledge and abilities in redesign of coursework. Training started with a core group in August 2008 and then expanded to the entire faculty in Spring 2009. Several faculty have implemented some of these teaching strategies into their coursework; however, after initial experimentation with Accelerated Learning, the College Faculty chose to pursue other active learning strategies and instructional designers to assist in providing students with optimal learning experiences.

The College does not have a reward structure outside of the promotion and tenure processes. On an individual basis, all faculty members are provided an \$800 stipend annually to attend the professional meeting of their choice. This is frequently used by faculty members to attend meetings of their specialty or the annual meeting of the American Association of Colleges of Pharmacy (AACP). On occasion, faculty members may attend an additional meeting or institute to represent the College. Most recently, six faculty members attended the AACP Institute on Active Learning methodologies. Attendees are selected based on interest and participation in related activities.

Many efforts have been devoted to enhancing faculty recruitment and retention; recent faculty salary adjustments, primarily focusing on the assistant and associate professor rank, are the most visible. As a result, salaries for most faculty members have been adjusted to that comparable to the 25<sup>th</sup> to 50<sup>th</sup> percentile in the *AACP Survey of Faculty*. To supplement these efforts, the College formalized its professional development efforts through the appointment of a formal Professional Development Committee in 2007. There are also several grant opportunities widely offered at the university and college levels to supplement travel and professional development activities (see Standard 26). Improvements in recruitment success have led to eight faculty appointments in 2009-2010 and two pending appointments in 2010-2011. These efforts have reduced open positions within the College although recruitment continues to be competitive. “Start-up” packages are not routinely available to appointees in either department; however, on occasion, funding has been provided when modest equipment needs were identified. Over the past several years, increases in pharmacy faculty salaries, as documented by national surveys, have exceeded contractual increases at the University, leading to a widening gap between national averages and College of Pharmacy salaries. Because of the continued growth in academic pharmacy, it will be necessary to assess salaries regularly to maintain them at a competitive level.

All faculty are expected to engage in service and scholarship while maintaining a focus on teaching. Levels of service and scholarship that exceed expectations are recognized in the promotion process, which has become more competitive in recent years. Recognizing the limited number of promotions that are available each year, faculty have increased their level of scholarship and service. Outside of promotions, no other reward structure is in-place in the College to recognize notable efforts.

Although referred to as adjunct faculty, the College lists over 300 faculty members that are volunteer or are employed by an institution that the College provides payment to for the placement of students assigned to Introductory or Advanced Pharmacy Practice experiences (IPPEs or APPEs). Appendix 24.2 provides a listing, based on type of experience of experiential clerkships taught by adjunct faculty. Approximately 50% of the fourth-year APPE’s are precepted by adjunct faculty members. The use of adjunct faculty provides students with a wider range of experiential options than available through faculty-precepted clerkships. In addition, adjunct faculty provide necessary flexibility in clerkships scheduling that arises from faculty leaves and resignations.

Didactic course work is almost exclusively taught by tenured/tenure-track faculty from the College, with the use of adjunct faculty for guest lectures on occasion. Use of tenured/tenure-track faculty from the College of Arts and Sciences continues for instruction of microbiology in the professional curriculum. Adjunct faculty members are carefully evaluated based on three critical areas: 1) education; 2) experience/expertise and 3) licensure (if applicable). The level of adjunct involvement in the program has been reviewed by ACPE and is seen as acceptable.

## I. Assessment and Evaluation

The Assessment Committee (AC) is charged with the task of assessment for the College of Pharmacy including developing tools, implementation, evaluation and dissemination of information to the appropriate individuals/groups. This committee is made up of faculty from each of the departments and is chaired by the Assistant Dean of Student Affairs and Assessment (ADSAA). Assessment data are organized under the University's recently implemented TracDat system. The TracDat system is a secured, web-based application designed for colleges or universities to organize their assessment activities. Programmatic and course-level objectives can be input along with means of assessment, results, criteria for success, follow-up and curricular and standards mapping. The University is in the process of cross-campus implementation of the system to assist in a centralized organization of assessment activities. The College of Pharmacy has consolidated its assessment activities using the TracDat system, which assists greatly in the organization of ability-based outcomes, course level objectives, AACP survey data, curricular and programmatic outcomes, results reporting and curricular mapping.

The assessment plan centers on curricular and programmatic outcomes. Curricular outcomes are taken directly from the faculty approved (2007) ability-based outcomes (ABOs) for the Doctor of Pharmacy program. Programmatic outcomes include a number of other policy, procedural and facility-related outcomes deemed important by the AC. Many of these programmatic outcomes are measured by the AACP surveys. The College of Pharmacy currently utilizes the graduate, faculty, alumni and preceptor surveys. Faculty and graduate surveys were last administered in 2009, alumni surveys in 2008 and preceptor surveys in 2007. All surveys are being run in 2010. The assessment plan in TracDat identifies the curricular and programmatic outcomes, means of assessment for each identified outcome, criterion for success, assessment schedule, and related courses (when applicable) within the College specific to each assessment. Criteria for success were identified by the AC as at least two-thirds of respondents rating agree or strongly agree. Comparisons to national averages for other participating Colleges of Pharmacy are also monitored. The unit assessment report within TracDat links the outcome, means of assessment as well as criterion for success to results along with an action plan and follow-up. Access to TracDat has recently been expanded to include all faculty members within the College of Pharmacy, facilitating their review of assessment data and allow for input of course-level information into the system.

The College of Pharmacy implemented an electronic portfolio for students with the Fall, 2009 entering class. The electronic portfolio is organized and maintained within the University's course management software (CMS, Blackboard). The decision to start with the University CMS was made to allow the College to test different components of an electronic portfolio before committing to dedicated software. Assessment activities in the portfolio included two reflective writing assignments (entrance to the College of Pharmacy; and key characteristics of a health care professional), and a mock patient counseling assignment. Students also conducted a self assessment of ability-based outcomes as part of the portfolio. Finally, curricular content evaluations for the P1 year were conducted in the portfolio.

Non-AACP survey data being used for assessment of curricular and programmatic outcomes include:

- Reflective writings by students in the electronic portfolio system: one to two reflective writings are given each year to students. These are scored for basic grammar and spelling, as well as content, professional development and integration with course material.

- Student self-assessment of the faculty approved ability-based outcomes: At the end of each academic year, students are asked to self-assess their competency on the ability-based outcomes for the program.
- Prescription simulations collected in the Practice Skills Labs: Student in P2 year complete prescription simulations that serve to integrate information from the P1 and P2 years of the program.
- The student presentations as part of the clinical seminar course (P4 year) are utilized as one form of embedded assessment.
- Comprehensive exams in Therapeutics are being evaluated as another tool for embedded assessment.
- Course content evaluations: Students complete an evaluation of each course at the end of the semester and provide the Curriculum Committee with feedback on the extent to which the faculty-approved content was covered and tested in the course.
- Results from NAPLEX and MPJE examinations.

The use of the TracDat system has organized and improved the assessment activities of the College of Pharmacy. The system provides a mechanism to insure that all assessment data reside in a single location, that a systematic mechanism exists to insure all data is tracked longitudinally, and that data is mapped against curricular, programmatic or course outcomes. Each data point must be assessed against a criteria for success, including a “Meets” or “Does not Meet” criteria toggle. Actions and follow-up are also systematically tracked within the system. The Assessment Plan Report within TracDat provides general accreditation information on each program, mission statement, outcomes, means of assessment, criteria for success and course mapping on each outcome (see Appendix 15.1). The University “Four-Column Report” provides more detailed information including outcomes, means of assessment, data results, action and follow-up (see Appendix 15.2). The College of Pharmacy has also programmed a Variance Report, which identifies all outcomes that have “not met criteria” along with action and follow-up. The Variance Report allows the AC and the faculty to quickly access problem areas identified by the assessment system. Curricular mapping also exists within the system.

Data from the *Faculty Survey* indicate that only 38.1% in 2009 compared to 46.7% in 2007 felt the college uses programmatic assessment data to improve the curriculum. At the time of the 2009 survey, the University and College were only in the beginning stages of implementation of the TracDat system. Since that time, all assessment data have been migrated to this system, along with greater organization and expansion of the assessment plan. Updates are given to the faculty at regular intervals during faculty meetings, and faculty are now beginning their training on accessing the TracDat system.

Assessment of individual courses is done at two levels. Students complete a content evaluation of each course in the revised curriculum at the end of the semester and provide the Curriculum Committee with feedback on the extent to which the faculty-approved content was covered and tested in the course. Student ratings of instruction for each course as well as for each instructor within that course are conducted using the Student Assessment of Instruction (SAI) form. This allows for assessment of content within the course as well as students’ perception of faculty knowledge and dissemination of the information. SAI results provide the opportunity to utilize student feedback for course improvement. TRACDAT reports are attached.

## J. Service to Non-Majors

The College does not offer service courses to other programs or departments in the University.

## K. Degree Program Cost and Productivity Data

According to calculations developed for the ACPE Self-study, the College has 44.6 FTE faculty with 5.4 FTE in adjunct faculty (supplemental faculty) support. This faculty supports a total of 604 students (2009-2010 data). Data compiled by the registrar's office may reflect a lower fall enrollment due (557) to August graduation of students in the accelerated track.

Program costs are in the upper-half for the University. A summary of 2007-2008 data (most recent available) is presented below.

Total credits required to graduate	138 (2009 Curriculum)
Instructor Cost per SCH (Avg)	\$223.90
Department Cost per SCH	\$67.40
Dean's Cost per SCH	\$52.31
<b>Total Cost per SCH</b>	<b>\$343.62</b>
Total Program Instructor Cost (assumes completion in one year)	\$30,114.88
Total Program Department Cost	\$9,066.74
Total Program Dean's Cost	\$7,035.61
<b>Total Program Cost (assumes student completion in one year)</b>	<b>\$46,216.23</b>

Total program costs for the Doctor of Pharmacy program rank second behind a high of \$102,284.96 and a low of \$2,036.49.

The College ranks fifth among the University's Colleges in Student Credit Hour/Full Time Equivalent Faculty (SCH/FTEF) at 585.38. The University range is a high of 585.38 SCH/FTEF, with a low of 258.33 SCH/FTEF. An additional metric that reflects a balance between SCH production and FTEF within the College is the comparison of total SCH production in the College – 4.99% of University total – with the total FTEF in the College – 5.04% of the University. This reflects a very balanced picture. (2008-2009 data).

## L. Administration Effectiveness

The College has implemented a modified administrative structure to address existing needs and fiscal restructuring. The College's Executive Committee consists of the Dean, the Associate Dean, the Assistant Dean for Student Affairs and Assessment (ADSAA) and two Department Chairs. The Department Chairs are classified as faculty members, to address day-to-day issues that arise within the departments and to provide additional perspective to the deliberations of the Dean, Associate Dean and Assistant Deans. This structure was implemented during the 2009-2010 academic year to address the loss of the Assistant Dean/Department Head for Pharmaceutical Sciences and to separate the Associate Dean and Department Head for Pharmacy Practice roles that had been previously assigned to a single position. This new structure has been effective in providing communication avenues and organizational structure for the College's faculty. In addition the structure provides parity between the departments, which had not existed in the previous organizational structure. This restructuring also increased support for assessment within the College by assigning all assessment responsibilities to the ADSAA with 50% of responsibilities relating

directly to assessment activities. Faculty evaluation of the Assessment Committee's efficacy will likely improve with this additional support.

Further strengthening administrative resources are two administrative positions - the Director of Off-Campus Student Services (DOCSS) and the Director of External Clinical Operations (DECO). The DOCSS position augments the ADSAA's on-campus activities providing comprehensive coverage for all student-related activities in the College including admissions, registration, recruiting, counseling (both academic and career), student records, progression, and commencement. The DECO supplements activities and responsibilities of the Associate Dean and the experiential team to maintain affiliation agreements and track all non-academic experiential requirements. Coordination of experiential programming is divided among three faculty members, forming the "experiential team." Team-taught courses are coordinated by faculty members assigned by the Department Chairs. Because of the widely distributed nature of the Pharmacy Practice Department, the DECO chairs a monthly meeting that includes the Pharmacy Practice Department Chair, Pharmacy Practice course coordinators, the experiential team and Pharmacy Practice administrative assistants. Additional College staff include three administrative assistants (one at each instructional site), three on-campus clerical staff members (two with blended assignments), an account clerk and four IT technicians (see Standard 24).

College Governance is codified in the *College Mission Statement*, the *Department Mission Statements*, the *Policy Statement on Standing, Procedural, and Ad Hoc Committees* (the Bylaws), the *FSU/FFA Collective Bargaining Agreement* and all applicable University policies. The College Bylaws specifies the composition and responsibility of each standing committee. Term limits within the committees ensures that all faculty members have the opportunity to play a meaningful role in the governance and operations of the College on a rotating basis. Based on the 2007 faculty data, the committee structure covers curricular development, evaluation and improvement as 83.3% agreed. Bylaws are updated by each respective committee as necessary; however, a bylaws ad hoc committee has been formed in the past when a complete revision was needed. Appendices 5.2 and 5.3 contain the College bylaws and the 2009-2010 College and University committee roster. A task force is in place to develop an electronic faculty handbook.

Meetings are scheduled separately for each department, generally on a monthly basis as warranted. These meetings provide for departmental business to be conducted regularly. College-wide meetings are scheduled in May, August and December with additional meetings scheduled when needed. Committee proceedings and decisions are communicated to faculty members through standing committee reports held in the monthly departmental meetings with required full-faculty discussion occurring at one of the College-wide faculty meetings. This method of dissemination of committee proceedings ensures that both departments have thorough discussion of committee decisions, although a limited schedule of College-wide meetings may delay full-faculty discussions that are often of a broader scope. E-voting has been effectively utilized to facilitate timely approvals. Dissemination of committee proceedings is generally limited to members of the College faculty and staff. A majority of faculty members agree or strongly agree that faculty meetings function effectively with 60% in 2007 and 66.7% in 2009. Noteworthy items are presented at the COP Alumni Advisory Board meetings held three times annually or at the annual National Advisory Council meeting. Significant developments are also included in the COP Alumni Newsletter that is published bi-annually. Additionally, the College has an Experiential Advisory Board. This Board consists of volunteer adjunct faculty with a purpose to brainstorm and gather feedback on current or proposed experiential policies, procedures, requirements or rotation content.

The student complaint procedure was updated by the ADSAA and is now routinely reviewed with all incoming students. This policy as well as survey data related to student process for raising issues and College response to student issues is further outlined in Standards 20 and 22.

College administrators routinely operate under an open-door policy with regard to student complaints. On a formal basis, the Dean's Advisory Board provides P1 and P2 student perspectives to the Executive Committee and the DOCSS conducts a Student Advisory Board at each instructional site, relaying concerns to the Executive Committee. Although routinely aware of student problems and engaged in constructive solutions, the actions of the Executive Committee are often not communicated to students or faculty in an open manner because of the need for discretion.

Regular use of the AACP/ACPE survey battery has provided a more complete picture of the assessment of administration in the College by various stakeholders including faculty and students. In light of that information, several achievements are notable including: 90.4% of the faculty members view the curriculum committee as effective; 68.7% of alumni feel the College communicates effectively with them. 85.7% and 71.4% of faculty feel that the administration is aware and responsive to faculty need/problems. This positive data is likely based on completion of the Department Chair appointments and the series of "transparency meetings" held with University administrators, Board of Trustee members and the faculty in 2008 and 2009. Compared with 53.5% in 2007, 95.2% of faculty are now aware of policies for harassment and discrimination. This is most likely due to the visible role the University's Chief Diversity Officer now plays in university operations and the increased activity of the College's Diversity Committee.

Faculty perceptions of the administrative function have been critical of administrative structure and effectiveness with only 33.4% SA/A that job descriptions are clear and complete and 42.9% SA/A that the administrative team works in a unified manner. With appointment of the ADSAA and the Department Chairs, both in 2009, improvement in these evaluations is expected; however, job descriptions will need to be written for the Department Chair positions.

The percentage of faculty who feel we have an effective faculty recruitment process is 57.1%. This data may reflect our difficulties each year to recruit and retain at a level to keep up with the normal rate of faculty turnover as well as our increase in faculty positions that correlate with our increase in enrollment from 120 to 150. These additional open positions were approved to account for the increase in student enrollment. Targeted emphasis should continue in this area and may be addressed by the newly appointed Department Chairs.

Administration of the Pharmacy Practice Department is exacerbated by the wide geographic distribution of faculty members. This was initially addressed with the appointment of an Interim Department Head in 2008, which returned to a faculty position in 2009, and was replaced by a Department Chair. With over 30 FTE's within the Department, a single Department Chair, maintaining faculty responsibilities, is challenged to meet all expectations of both senior and entry-level faculty members. Additionally, in 2009, 52.3% of faculty members agree that they receive adequate support staff resources. This data is likely related to the expansion of the experiential program, need for full time administration of the Pharmacy Practice Department and the wide spread distribution the faculty within this department. Additional support staff resources or a restructuring of support staff services is needed.

Course scheduling within the Doctor of Pharmacy program is generally structured as a block schedule, providing effective and efficient use of classroom facilities and faculty. Implementation of the 2009 Curriculum has brought increasing complexity to the scheduling process and additional laboratory components must be integrated into the scheduling rubric. Student progress through the curriculum in a step-wise manner with all courses scheduled to ensure that in-sequence students graduate in four academic years. Elective courses are offered in the P2 and P3 years. Departmental planning identifies courses and adequate enrollment caps to provide all students with some choice in their elective course options.

## **Section 4. Facilities and Equipment**

### **A. Instructional Environment**

The College's implementation of the entry-level doctor of pharmacy degree in 2000 brought with it a significant challenge to support enrollment of 120 students annually (now 150 students annually), specifically to provide adequate clinical training opportunities for students with the University campus. This led to the development of two additional community campuses – one in Kalamazoo which had been the site of the College's post-BS Doctor of Pharmacy program and the second in Grand Rapids. With this implementation plan, the College strengthened its existing affiliations with the Kalamazoo Center for Medical Studies/Western Michigan University and the Grand Rapids Medical Education and Research Center (now the Grand Rapids Medical Education Partners). These expanded affiliations established dedicated and shared instructional space in each location that included classrooms, computer labs, student study rooms and shared arrangements to use multi-media classrooms. (See Appendix 27.1 for a complete summary of facilities.)

Classroom capacity at the off-campus instructional sites was adequate for the enrollment expansion with capacity for 60 students in Kalamazoo and 95 students in Grand Rapids. However, as the expansion began, the Pharmacy Auditorium was the only room capable of accommodating 150 students. To expand capacity, two adjacent third-floor classrooms were combined to form a single, larger classroom capable of accommodating 150 students. Additionally, conversion of three small first-floor classrooms into a single student commons area immediately across from the large lecture hall was completed that year. In 2008, the College's principal auditorium was completely remodeled to increase student comfort and update technology capabilities for faculty. While the original lecture hall was able to accommodate approximately 320 students in theater-style seating, a reduction in seating capacity to 160 seats greatly enhanced the quality of the learning environment providing each student with a desk-top to organize their materials on, adjustable seating, improved visibility and an advanced audio/visual system capable of distance learning with other sites on- and off-campus.

Two additional projects are in various stages of discussion at this time. The first will convert a first-floor storage area between the existing model pharmacy and practice lab into a sterile admixture preparation room, compliant with Standard 797. This renovation is seen as critical in preparing students for the institutional-based IPPE in the summer following P2. It is envisioned that the room will provide students with a certified clean room environment as utilized in hospital pharmacies. This project is anticipated to be completed for the fall, 2010, semester.

The second facilities project under discussion is the proposal to combine the Grand Rapids and Kalamazoo instructional sites into a single location in the Grand Rapids "medical mile." The approximately ten block area along Michigan Avenue in Grand Rapids includes offices, classrooms and laboratories for Michigan State University's College of Human Medicine, the Van Andel Research Institute, Grand Valley State University's Cook-DeVos Center for Health Sciences and Spectrum Health's Butterworth Hospital, Holton-Lemmen Cancer Center and the Helen DeVos Children's Hospital and Clinic. Current plans call for completion of a single facility of approximately 25,000 square feet to support instruction and training in P3. The University is currently awaiting a decision from the State regarding appropriation of a capital outlay expenditure for the project. The proposed timeline calls for completion of the facility and occupancy in August, 2011. Until that time, leases in both Grand Rapids and Kalamazoo have been extended to ensure instructional continuity.

In each of the three instructional sites, facilities meet all pertinent standards for safety and are well maintained by on-site custodial staffs. Although distinctively different in architectural



design, the off-campus instructional sites utilize facilities that share an educational mission, specifically medical education. Thus, students are exposed to physical facilities of comparable quality regardless of location. For example, computer labs have been equipped at all three locations in a consistent manner, utilizing campus standards for the purchase of equipment and software and a pool of technicians that routinely communicate with each other regarding equipment and software. On-campus and in Grand Rapids, a 40-station lab is available while in Kalamazoo, a 32-station lab is available.

Availability of faculty office space is dependent on assignment location. Facilities on campus are more than adequate with each faculty member assigned to a private office and additional offices currently unoccupied. Faculty at clinical practice sites are generally provided an office at the clinical site; in addition, offices are available in both the Grand Rapids and Kalamazoo instructional facilities for faculty with unique assignments. The proposed facilities allowing for consolidation of the two off-campus instructional sites will increase office availability substantially including private offices as well as the 'hoteling' arrangements for visiting faculty.

All faculty members are provided laptop or desktop computers by the College with technical support available through the University, although some faculty members may access on-site support if located in a health system or clinic. This arrangement has met most faculty needs and provided a relatively consistent 'operating platform' for IT within the College. Directly related to IT equipment and support is the College's distance learning capacity, connecting classrooms in Grand Rapids with those in Kalamazoo. Renovation of the Pharmacy auditorium has also allowed for distance learning on-campus. Equipment updates at instructional sites have been routine over the past six years and the current level of technology represents the most stable and predictable arrangement yet achieved. Budgetary realignments may present challenges in the future to provide the continued upgrades that have become commonplace in the past.

Distance learning is relied upon for didactic instruction in the P3 year and most faculty have adapted well to the 'split audience' that results from the arrangement. New faculty members entering the College are made aware of the need to involve both groups and to plan ahead for the use of videoconferencing. Despite these efforts, videoconferencing requirements are undoubtedly the most challenging element of the multi-campus arrangements. All other components of both sites are comfortable and support professional education outcomes.

On-campus, laboratory space has been repurposed for instructional space on both the second and third floors. With this conversion, the remaining laboratory space is appropriately sized for current faculty research activities within the College. Although located in the College of Pharmacy, all functions related to the certified Animal Care Facility are the responsibility of the Provost's office. None of the College's courses require the use of live animals.

Despite the above-mentioned facilities, faculty members are concerned that the existing resources may be inadequate to support the current enrollment level. The majority of the faculty disagree that the College's resources are adequate for the class size; 76% disagreed in 2007 and 66% in 2009; whereas, 83.1% of 2008 graduates and 79.3% of 2009 graduates SA/A with the statement "the classrooms in the college were conducive to learning." Labs and other non-classroom environments were also highly rated by graduates with 82.3% of 2008 graduates and 89.7% of 2009 graduates SA/A with the statement "Labs and other non-classroom environments were conducive to learning."

Proposed renovations on-campus and the pending consolidation of the Grand Rapids and Kalamazoo instructional sites into a single, larger facility will address some of the concerns relating to office space and room to interact with students. Overall, faculty members say they have the resources needed to fulfill their responsibilities. The large majority of the program's graduates feel that the spaces and computer resources were sufficient to meet their educational needs.

The College of Pharmacy has devoted substantial resources to ensuring that the Doctor of Pharmacy program is supported adequately both on- and off-campus. Two novel locations have been renovated and equipped to provide instructional space and faculty offices for the third year of the program. This has placed students in academic medical organizations located in larger population centers in West Michigan, facilitating access to clinical placements. Further, the College has committed substantial resources to the implementation and refinement of the videoconferencing facilities in each location. On-campus space has been repurposed from laboratory to classroom configurations to reflect the diminished use of research labs and increased use of cognitive labs/small classrooms in the evolving pharmacy curricula. In response to the *AACP/ACPE Faculty Survey* indicating a significant level of disagreement in regard to facilities, focus group discussions will be facilitated by the Department Chairs to ascertain perceived deficiencies. Deployment and refinement of the new curriculum will require integration at many points within each professional year. Consolidating the P3 year in Grand Rapids will facilitate this transition and will increase total physical resources available and consistency of resources for all students.

Experiential programming within the College of Pharmacy is designed to sequentially develop the student's knowledge, skills and abilities in each professional year. There is a defined progression of the depth of experiential education that transitions from early preceptor modeling to ultimately, preceptor facilitation of independent learning. Practice facilities utilized by the College for all IPPE and APPEs precepted by Pharmacy Practice or adjunct faculty are detailed in Appendix 24.2. Departmental faculty primarily precept adult in-patient medicine and ambulatory medicine experiences, though specialty areas such as pediatrics, oncology, psychiatry and drug information are also supported by department faculty members.

In the P1 year, students visit selected preceptors in a variety of practice settings (community, institutional, academia) and prepare a report that is presented orally in the P1 Integrated Lab course. Assignments are made by a faculty member to ensure a variety of practice settings among the class and that students visit practices that they are unfamiliar with. A complete orientation, outlining the learning outcomes of the visits, is provided to all students prior to the visit.

In the 2000 Curriculum, P3 experiential assignments occur at a broad range of sites inclusive of both community pharmacy and institutional settings. The community experience has been a longitudinal (one day per week) experience for one semester during the P3 year. The institutional experience has consisted of a three-week block during the summer following the P3 year. The community IPPE is highly structured and focuses on non-prescription therapy and management-related topics. The institutional IPPE concentrates on the dispensing and workflow processes of an inpatient pharmacy. In the 2009 curriculum, both experiences will be three-week blocks in the summer after the P1 (community) and P2 (institutional) years to foster earlier engagement in these practice settings. The Experiential Team (ET), consisting of the experiential coordinator, practicum director and community practice faculty members, is responsible for assigning students to sites and ensuring that all requirements are met.

Annually, the Experiential Coordinator (EC), the Director of External Clinical Operations (DECO), and Associate Dean meet to review the necessary number of adjunct practice sites needed for the upcoming scheduling cycle. Factors such as faculty vacancies, scheduled leaves and budget considerations determine adjunct practice facility needs. Additionally, the EC regularly reviews the geographic and practice focus of adjunct facilities. The College screens all potential sites and preceptors on the basis of criteria outlined below for required pharmacy practice experiences. The ET is in the process of developing formalized self-assessment documents that will be utilized in the identification of all potential new sites and preceptors. Practice sites are routinely visited to ensure

that appropriate policies and procedures are followed. In addition, student evaluations of the sites and preceptors are utilized in the ongoing evaluation of practice site quality.

The College recognizes the importance of practice site resources for student learning and clinical faculty development. Most faculty members (66.7%) SA/A that they had adequate resources for their research and/or scholarship needs. The College also places great emphasis on selecting quality adjunct faculty-supported experiential sites. Of recent graduates surveyed, 71% SA/A that the sites selected for IPPE education are of high quality. In addition, considering both introductory and advanced pharmacy practice experiences, recent graduates felt that the process by which experiential sites were assigned is fair (77% for IPPEs and 72.4% for APPEs).

To assist students in experiential site selection, practice site descriptions, requirements and other information resources are available either in print or online. A new site evaluation form, to be implemented in summer of 2010, will further support the selection of high-quality practice settings.

Recognizing the value of student exposure to diverse patient populations and practice settings, the College offers a variety of elective APPEs. Unique opportunities include clerkships with the Michigan Pharmacist's Association, Blue Cross/Blue Shield of Michigan, nuclear pharmacies, a drug information centers and others. Further, students selected through an application and interview process have the opportunity to participate in an international pharmacy student exchange program with the University of Angers (France) and the University of Bath (England). With advance planning and approval by the ET, students are able to self-arrange experiences in specialty practice areas not currently provided by the College. The majority of alumni surveyed (84.8%) SA/A that, during their experiential education, an adequate number and mix of practice facilities were provided. Likewise, 91% of recent graduates SA/A that their experiential education allowed them to have direct interaction with diverse patient populations (e.g. age, gender, ethnic and/or cultural background, disease states).

Involvement in interdisciplinary health care teams is recognized as essential to student development of patient care skills. Health care professionals with whom students regularly interact include physicians, nurses, dietitians and others, as well as students from many of these disciplines. Recent graduates and preceptors alike overwhelmingly SA/A that the experiences provided by the College allowed the students to collaborate with other health care professionals (95% and 97.9%, respectively).

In the 2009 AACP/ACPE survey only 34.4% of faculty SA/A that the College program's resources can accommodate present student enrollment. To address this concern, the College is continuously and actively seeking additional practice sites and adjunct faculty members to precept pharmacy practice experiences. Adding to this concern, in the 2009 Curriculum, total experiential hours will increase with the implementation of a "Longitudinal Patient" experience in the P2 and P3 years, as well as a required institutional APPE in the P4 year. With the recent appointment of a practicum director and a community experiential coordinator, new practice sites are being developed and will increase capacity to address the expanded experiential requirements.

An affiliation agreement is established by the College prior to faculty or student placement at experiential sites whenever possible. Two standardized agreements exist, one for sites precepted by adjunct faculty (see Appendix 28.1) and a second for sites with an assigned Pharmacy Practice department faculty member (see Appendix 28.2). Both agreements clearly outline the responsibilities, commitments and expectations of the College and the site and include provisions for termination of the agreement following appropriate notification. The agreements also address requirements and expectations pertaining to student-related matters including liability and professional conduct. When a standardized agreement is not used (a site-specific agreement), the DECO, assisted by the University's legal counsel and risk management office, thoroughly reviews

the proposed agreement to ensure all language is consistent with the essential elements of the University's standard agreement.

Approximately 80% of adjunct supported experiential sites currently utilized have affiliation agreements on file with the College of Pharmacy's DECO. All practice sites with College faculty assigned have affiliation agreements in place or are affiliated through membership in other organizations (i.e. GR-MEP). The College is actively working to ensure that all practice sites regularly used have affiliation agreements on file and that these agreements are updated at regular intervals.

Students are required to maintain a valid intern license beginning with experiential activities in the P1 year. Prior to any experiential placement, students must complete a "Clinical Passport" (see Appendix 28.3), which ensures that various prerequisites are met, including required immunizations, HIPAA training and more. Students failing to meet these requirements are not allowed to engage in clinical activities required by the curriculum. The DECO oversees the completion of this requirement prior to experiential placement.

To help guide overall experiential programming, the ET has recently convened an Experiential Advisory Board (EAB). The EAB consists of interested adjunct and departmental faculty members and meets periodically to discuss timely issues pertaining to and suggestions for improvement of experiential education across a variety of practice settings. As a result, the College has gathered and will continue to elicit vital input from this group and ensure open communication between experiential faculty and the College in the ongoing quality improvement of pharmacy practice facilities.

The College has taken significant steps to enhance the quantity, quality and consistency of all aspects of the curriculum's experiential components. The formation of the ET, consisting of approximately 3.5 FTE's, provides support for the further development of existing clerkships and the implementation of new clerkships. This group is further supported by the DECO position, responsible for all aspects of the students' Clinical Passport system. This level of organization is a significant step forward since the last accreditation process, representing a commitment of resources by the College to ensure that experiential elements of the curriculum exceed accreditation standards and provide students with hands-on experiences in state-of-the-art practices. Complementing this experiential administrative structure, the ET has reorganized the EAB to gather *practitioner-based* insights in the continual quality improvement process for all experiential components. This added perspective ensures that refinements in experiential elements considers academic and practice objectives.

Implementation in fall, 2010, of a new management system for experiential scheduling will bring with it significant increases in the College's ability to communicate with students and adjunct faculty in all aspects of experiential education, including scheduling, report preparation, outcome achievement and evaluation and assessment. Although a significant cost to the College at a time of tightened budgets, this commitment is further evidence of the importance the College places on the conduct of its experiential programming.

Development of practice site selection criteria and a more formalized method for identification of practice sites and adjunct faculty is underway by the ET. Continued growth within the adjunct faculty and clinical practice site listing necessitates that this be completed promptly. With heavy reliance on adjunct faculty for preceptorship of elective clerkships, the ET must ensure that an appropriate mix of clerkships are available to students to meet their experiential interests and ensure that practice specialty and patient diversity is considered.

Assignment of the Clinical Passport system to the DECO has resulted in a significant improvement in compliance with all experiential requirements for students. Continued escalation of requirements for placement has led to an exponential increase in information and organizational

needs which will be addressed by the implementation of a new management system. Current levels of staffing within the College do not provide routine clerical support to the ET or the DECO for these essential roles. This must be re-evaluated as the scheduling system is integrated daily into operations and placement requirements continue to expand.

### **B. Computer Access and Availability**

In each instructional site, computer labs are provided for student use. On-campus, a 30-station lab is provided for use at any time during the day. Additionally, the practice-laboratory and cognitive skills lab may be accessed by students if not scheduled for class use. At the Kalamazoo instructional site, a 32-station computer lab is available around-the-clock for student use. The Grand Rapids instructional site includes a 40-station computer lab, also accessible around-the-clock for students assigned to the site. In addition to the off-campus computer labs, both the Kalamazoo and Grand Rapids locations offer additional computers for student use in lounge and lobby areas. All classrooms in the College as well as the instructional sites are equipped with computers and projectors, similar to the “smart classroom” campus model. Software availability is consistent in all sites and with the campus standards.

The recently renovated on-campus auditorium is equipped with distance-learning technology to allow delivery of lectures from off-campus faculty; similarly the off-campus instructional sites each have a distance learning classroom that accommodates the students assigned to the site. Equipment is updated as needed or as new technology is available.

Faculty members located on-campus are provided desktop systems consistent with campus standards. For off-campus faculty, laptops with docking stations are provided to provide mobility to accommodate use of assigned computers at the instructional sites.

IT support on campus is provided through Gamma Team. This is complemented by a 0.5FTE technician at each of the off-campus instructional sites; technicians at the off-campus sites are employees of either the Kalamazoo Center for Medical Studies or the Grand Rapids Medical Education Partners. In addition, the College shares an IT technician with the CPTS in Grand Rapids that provides a valuable linkage with the campus consortia and supports all off-campus faculty, regardless of practice site. The College follows the campus replacement plan for computer renewal.

Overall, students, faculty and the distance learning course work is well supported by the hardware/software and technical support at each instructional site. It is anticipated that the relocation of the Kalamazoo instructional site will reduce distance learning use in the P3 year, while implementation of the new curriculum may increase distance learning use on-campus.

### **C. Other Instructional Technology**

### **D. Library Resources**

The College established and supports a Drug Information Center in collaboration with the Kalamazoo Center for Medical Studies (KCMS). The Center is staffed full-time by a tenured faculty member of the College and serves as a resource for clinicians at KCMS and for College faculty and students. The Center provides a core of information resources and expert assistance for college students, adjunct faculty and faculty as well as KCMS clinicians in obtaining and evaluating appropriate resources. There is a close collaboration between the Center and the University’s library, the Ferris Library for Information, Technology and Education (FLITE).

FLITE has focused on collecting titles recommended by the American Association of Colleges of Pharmacy (AACP), and currently holds 96% of the recommended core titles (26%

available online) listed in the 2008 version of the *Basic Resources for Pharmacy Education* and 58% of recommended non-core titles (31% available online). FLITE has access to 73% of the recommended journals (96% available online) listed in the 2009 *AACP Core List of Journals for Libraries that Serve Schools and Colleges of Pharmacy* (See Appendix 29.1 ). Cross-searching of journals is facilitated by access to many databases, and a listing of selected databases can be found in Appendix 29-2. FLITE provides a free interlibrary loan (ILL) service for students, faculty, and affiliated adjunct faculty to obtain articles that are not directly accessible. Students, faculty and staff can also get books using the MelCat system; cooperating libraries that share resources.

Information on the MelCat system can be found at: <http://www.ferris.edu/library/distanced/melcatdistanced.html>. In addition an individual can request a book through the ILL system with direct shipment to the individual. Because of the extensive online availability of resources and systems in place to deliver books, off-campus students and faculty have broad access to library materials that is comparable to that of on-campus students.

The College is allotted an annual budget by the library for the purchase of books and other materials. Pharmacy faculty input is solicited by the Health Sciences Librarian to support the curriculum and interests of the program. Because pharmacy students may be at sites other than the main campus, the electronic format is routinely selected when available to optimize access to resources.

In addition to FLITE, the students in the off-campus sites have access to local institutional libraries. In Grand Rapids, the students have access to two medical libraries – St. Mary’s Mercy Medical Center and Spectrum Health - and one library in Kalamazoo - Bronson Health System. Students completing IPPEs/APPEs also have access to the resources located within that clerkship’s site.

Adjunct faculty members have full access to FLITE resources. This access provides all adjunct faculty members with an important resource for student instruction as well as an incentive to those considering an adjunct appointment. In addition, all community practice IPPE and APPE practice sites are provided a current copy of the APhA OTC Handbook.

Students are introduced to FLITE’S resources in their first professional year as part of Integrated Lab I (PHPR 303). In-depth instruction on the use of FLITE resources is provided in the Drug Literature Evaluation and Study Design course (PHPR 550). The database *AccessPharmacy* was recently acquired and is available to all College students, faculty and adjunct faculty and has obviated the need for purchase of many textbooks by students. On a selective basis, print versions of key textbooks are purchased for faculty use.

All new faculty members are oriented to FLITE’s resources during the New Faculty Orientation program offered by Ferris. Adjunct faculty members are made aware of available resources at the annual Preceptor’s Development Conference as well as through mass e-mails throughout the year.

Overall, the students, faculty and adjunct faculty SA/A that there are sufficient resources available for the COP. In 2007, 76.7% of the faculty SA/A that they had access to the library and other educational resources compared to 95.3% in 2009. According to the 2007 preceptor survey, 70% of adjunct faculty SA/A that Ferris provided access to library and educational resources. Since that time preceptors have been given access to FLITE’s resources and to the Education Scholar program. Alumni completing the graduate survey agreed or strongly agreed that they had adequate access to resources while on campus (96% in 2008 and 97% in 2009) and during pharmacy practice experiences (95% in 2008 and 93% in 2009).

The University’s use of Tegrity, a lecture capturing software platform, allows faculty to record live lectures and upload them to Blackboard courses, allowing students to view these at their leisure. All three campuses are equipped to record lectures utilizing Tegrity and all off-campus

faculty members have laptops that support Tegrity software. Other programs are also available to help students in their studies, including Study Mate (a game creation software) and SafeAssign (a program that allows students and faculty to check for plagiarism), that can be made available to students through Blackboard.

The College is capable of addressing drug information needs through resources in both FLITE and the KCMS Drug Information Center with a high-level of expertise. Ongoing collection development for the College of Pharmacy occurs on an annual basis with input sought from College faculty by the FLITE medical sciences librarian with purchases based on need and available budget appropriations. The College was recently able to obtain access to two new databases (AccessPharmacy & Lexi-Comp) that further enhance the student's capabilities in patient care. The health sciences librarian reviews the holdings in FLITE and compares them to AACP's list on an annual basis so as to target recommended titles for purchase. Recommended titles that FLITE does not have are purchased when the budget allows.

Adjunct faculty access to all FLITE resources was established in 2009 after significant efforts with the University's Human Resource department. FLITE access allows adjunct faculty to utilize resources that will help further the student's experiences and learning while on IPPEs/APPEs.

Increased utilization of FLITE resources has led to a significant increase in costs, especially through ILL. This has resulted in a limit on ordering articles which may negatively impact patient care if excessive articles are needed. This has been relieved by FLITE's purchase of more electronic journal subscriptions reducing ILL volume. In addition, access to health information resources and libraries, an expectation of the affiliation agreement, provides students and assigned faculty 'local' support for routine information needs. Continued development of FLITE's electronic resources and refinement of the ILL process will be critical as information resource utilization continues to increase.

## **Section 5. Conclusions**

The Doctor of Pharmacy program supports the University's Mission, preparing students for a meaningful career as one of the most respected members of the healthcare team. College graduates are recognized state-wide and nationally for their practice skills, knowledge base and commitment to patient-centered care. With over a 110-year history, the College of Pharmacy is one of the University's most recognized programs and is often the first program thought of when the University is mentioned. And, as one of the largest programs in the country, graduates are involved in all areas of pharmacy practice throughout the country, with many holding leadership roles in key organizations, academic institutions and industry.

The program's value is obvious to students and graduates, with the assurance of employment reflected by a 100% placement rate for graduates. As the provider of over half of all practicing community pharmacists in the State, graduates are of unquestioned value to the citizens of the State as the community pharmacist is often the first contact for those in need of health care. Similarly, hospital-based pharmacists are responsible for managing many medications because of their unique understanding of pharmacokinetics and pharmacodynamics. The expanding scope of pharmacy practice, continued growth of prescription usage and aging of the population will make the pharmacist an indispensable health care provider.

Recognition of the expanding role of the pharmacist and continued growth of health care has resulted in a pool of well-qualified candidates annually. Addition of in-person interviews for all qualified candidates allows for selection of students with the academic and communication skills necessary for success in the program and the profession.

Ongoing implementation of the revised curriculum with increased use of active learning and other innovational teaching methodologies provides students with a contemporary curriculum that features a wide range of practice experiences built upon an excellent foundation in the pharmaceutical sciences. Faculty members are actively engaged in teaching and the further development of their pedagogical skills. They are key members of the profession, providing a wide range of support to professional organizations and original research.

In summary, the Doctor of Pharmacy program is one of the University's most visible and respected programs. The 2010 Academic Program Review and ACPE Self-study documents the successful efforts of college faculty, staff and administrators to provide academically qualified students with an excellent education and career opportunity



**ACPE Standards 2007 —Appendix B”**

**Additional Guidance on the Science Foundation for the Curriculum**

*During the standards revision process from 2003 to 2006, ACPE stakeholders (faculty, practitioners, regulators, and others) identified elements of the science foundation that they believe essential to the development of pharmacists. Some of these areas may be addressed in pre-pharmacy courses, while the majority would be the purview of the curriculum of the professional degree program. The majority of the sections listed would reflect required course work, while some could be addressed in elective courses.*

*Laboratory experiences and patient-care simulations should be incorporated as appropriate to the subject matter. Topic headings do not imply the need for separate courses but rather that the material be addressed adequately in the curriculum. Content may be delivered as individual or integrated courses involving multiple disciplines. It is expected that the listing below will change as a function of evolution of the profession, leading to future updates of this appendix.*

*Thus, the following information is provided as a basis for curricular evaluation and continuous quality improvement, driven by the mission and goals of the college or school.*

Today’s ever-changing health care environment requires a pharmacy practitioner to be knowledgeable and competent in the following areas critical to the foundation and delivery of effective patient care. The foundation in the sciences suggested by ACPE stakeholders follows:

**Basic Biomedical Sciences**

Anatomy and Physiology

- structure and function of major body systems: integumentary, muscular skeletal, cardiovascular, lymphatic, respiratory, digestive, nervous, endocrine, urinary, reproductive, and body fluid and electrolytes
- molecular aspects of cell biology
- cell physiology and cellular structure and organization

Pathology/Pathophysiology

- basic principles and mechanisms of disease, including:
  - inflammation and repair
  - degeneration
  - disturbances on hemodynamics
  - developmental defects
  - neoplasia
- pathophysiology of disease states amenable to pharmacist intervention

Microbiology

- general principles of microbial concepts
- principles of infectious disease

- host-parasite relationships
- pathogenic micro-organisms of man
- inflammatory responses to infectious agents
- clinical aspects of infection

#### Immunology

- human immunity and immune response
- principles of antigen-antibody relationships
- molecular biology of immune response
- genetic basis for antibody synthesis, development, function, and immunopathology

#### Biochemistry/Biotechnology

- chemistry of biomacromolecules (proteins, lipids, carbohydrates, and DNA)
- enzymology and co-enzymes and kinetics
- metabolic pathways to energy utilization
- nucleic acid metabolism, including DNA replication and repair, RNA, and protein synthesis
- recombinant DNA technology

#### Molecular Biology/Genetics

- cell structure and components
- ion channels and receptor physiology
- mitosis and meiosis
- chromosomes and DNA
- gene transcription and translation processes
- recombinant DNA technology

#### Biostatistics

- understanding of commonly used statistical tests and their basis
- management of data sets
- evaluation of statistical results
- understanding of statistical versus clinical significance

### **Pharmaceutical Sciences**

#### Medicinal Chemistry

- physico-chemical properties of drug molecules in relation to drug absorption, distribution, metabolism, and excretion (ADME)
- chemical basis of pharmacology and therapeutics
- fundamental pharmacophores for drugs used to treat disease
- structure activity relationships in relation to drug-target interactions
- chemical pathways of drug metabolism
- application to making drug therapy decisions

## Pharmacology

- mechanism of action of drugs in various categories
- role of pharmacology in drug choice and the treatment of disease
- pharmacodynamics of drug action and absorption, distribution, metabolism, and elimination
- adverse effects and side effects of drugs
- drug-target interactions
- drug-drug, drug-food, drug-lab test interactions
- drug discovery and development

## Pharmacognosy and Alternative and Complementary Treatments

- concepts of crude drugs, semi-purified, and purified natural products
- variability of occurrence of pharmacologically active substances in plants and impact on regulatory aspects of herbal products
- overview of classes of pharmacologically active natural products
- dietary supplements (vitamins, minerals, and herbals)
- alternative medical treatments
- evaluation of alternative and complementary medicine purity, bioavailability, safety, and efficacy
- herbal-drug interactions
- Dietary Health Supplement and Education Act and impact on regulation of dietary supplements and herbal products

## Toxicology

- mechanism of toxicity and toxicokinetics
- acute and chronic toxic effect of xenobiotics on the body, including drug or chemical overdose and toxic signs of drugs of abuse
- interpretation of drug screens
- antidotes and approaches to toxic exposures
- functions of poison control centers
- bioterrorism and disaster preparedness and management

## Bioanalysis/Clinical Chemistry

- fundamentals of laboratory medicine and its importance to screening, diagnosis, and evaluation of patients
- clinical data relevant to disease state management

## Pharmaceutics/Biopharmaceutics

- physical-chemical principles of dosage forms
- biological principles of dosage forms
- principles of drug delivery via dosage forms (e.g., liquid, solid, semi-solid, controlled release, patches, and implants)
- principles of dosage form stability and drug degradation in dosage forms
- materials and methods used in preparation and use of dosage forms

## Pharmacokinetics/Clinical Pharmacokinetics

- basic principles of in vivo drug kinetics (linear and nonlinear)

- principles of bioavailability/bioequivalence
- physiologic determinates of drug onset and duration
- drug, disease, and dietary influences on absorption, distribution, metabolism, and excretion
- clinical pharmacokinetics of commonly used and low-therapeutic-index drugs
- the pharmacokinetic-pharmacodynamic interface

#### Pharmacogenomics/genetics

- genetic basis for disease and drug action
- genetic basis for alteration of drug metabolism
- genome and proteomic principles in relation to disease and drug development
- genetic basis for individualizing drug doses

#### Extemporaneous Compounding/Parenteral/Enteral

- United States Pharmacopeia guidance on compounding and FDA Compliance Policy Guidelines
- techniques and principles used to prepare and dispense individual extemporaneous prescriptions, including dating of compounded dosage forms
- liquid (parenteral, enteral), solid, semi-solid, and topical preparations
- dosage form preparation calculations
- sterile admixture techniques
  - United States Pharmacopeia (USP) Chapter 797
  - stability and sterility testing and dating
  - clean room requirements
  - infusion devices and catheters

#### **Social/Behavioral/Administrative Pharmacy Sciences**

##### Health Care Delivery Systems

- introduction to United States, state, and local health care delivery systems and their interfaces
- social, political, and economic factors of the U.S. health care delivery system
- principles that influence the distribution of pharmaceutical products and services
- role of public and private insurers, pharmaceutical industry, and managed care on health care delivery in the United States
- Medicare and Medicaid
- Indigent care programs
- incidence of and problems associated with drug overuse, underuse, and misuse in the U.S. health care system

##### Economics/Pharmacoeconomics

- economic principles in relation to pharmacoeconomic analysis
- concepts of pharmacoeconomics in relation to patient care
- applications of economic theories and health-related quality-of-life concepts to improve allocation of limited health care resources

## Practice Management

- management principles (planning, organizing, directing, and controlling resources) applied to various pharmacy practice settings and patient outcomes
- management of staff within the practice setting, including pharmacists, technicians, and other supportive personnel
- principles of planning, organizing, directing, and controlling pharmacy resources.
- tools, including informatics, needed to assess and address change, increase competitiveness, improve quality, and optimize patient services
- management of medication use safety systems
- strategies to improve continuity of patient care as patients move between health care settings
- marketing principles
- basic accounting principles
- infection control
- project management
- managing and improving the medication-use process
- third-party administration and managed care systems
- health care improvement mechanisms at the micro- and macro-system levels

## Pharmacoepidemiology

- application of principles of epidemiology to the study of drug use and outcomes in large populations
- studies that provide an estimate of the probability of beneficial effects in populations, or the probability of adverse effects in populations, and other parameters relating to drug use benefit
- methods for continual monitoring for unwanted effects and other safety-related aspects of drugs

## Pharmacy Law and Regulatory Affairs

- legal basis of pharmacy practice
- pharmacist's responsibilities and limits under the law
- pharmacist's role in reducing liability by reducing drug-related misadventure
- civil versus criminal liability
- business contract law

## History of Pharmacy

- overview of the evolution of pharmacy as a distinct profession
- moving from focus on the drug to focus on the patient and the drug, including clinical pharmaceutical care and other aspects of patient-provided pharmacist care
- major milestones and contributors in the evolution of pharmacy

## Ethics

- principles of professional behavior
- ethical issues related to the development, promotion, sales, prescription, and use of drugs
- dealing with ethical dilemmas

- conflict of interest
- ethical issues in delivery of patient-centered care and clinical research
- principles of end-of-life care
- ethical issues in teamwork

#### Professional Communication

- effective verbal and written interpersonal communication
- health literacy
- communicating with diverse patients, families, pharmacists, and other health professionals in a variety of settings, both individually and as a member of a team
- interviewing techniques
- active listening and empathy
- assertiveness and problem-solving techniques
- cultural influences on communication of health information
- group presentation skills
- strategies for handling difficult situations
- documentation of pharmacist recommendations and consultations
- principles of behavior modification

#### Social and Behavioral Aspects of Practice

- pharmacy as a patient-centered profession
- patient and other health care provider perceptions of pharmacists' capabilities
- role of the pharmacist related to patient care
- role of the pharmacist related to interaction with other health care professionals
- development of leadership skills
- importance of involvement in pharmacy organizational, regulatory, state, and federal issues

### **Clinical Sciences**

#### Pharmacy Practice and Pharmacist-Provided Care

- overview of the pharmacy profession
- issues of contemporary practice
- emerging and unique roles for the pharmacist on the health care team
- concepts of pharmacist-provided patient care and medication therapy management services
- principles of pharmacist-managed, patient-centered pharmacy services
- methods of outcome monitoring and assessment techniques
- problem identification (e.g., duplication, dosage, drug interactions, adverse drug reactions and interactions, frequency, dosage form, indication mismatches) and resolution
- role of pharmacy care plans in patient care
- monitoring for positive and negative drug therapy outcomes
- evidence-based practice and decisions
- principles of clinical management of drug toxicity and overdose
- home diagnostic devices

### Medication Dispensing and Distribution Systems

- preparation and dispensing of prescriptions
- development and maintenance of patient medication profiles
- identification and prevention of medication errors
- identification and prevention of drug toxicity
- issues of distribution systems associated with all types of practice settings
- role of automation and technology in workload efficiency and patient safety
- assurance of safety in the medication-use process
- medication error reduction programs
- continuous quality improvement programs

### Pharmacotherapy

- principles of clinical practice guidelines for various disease states and their interpretation in the clinical setting
- integration of core scientific and systems-based knowledge in patient care decisions
- reinforcement of basic science principles relative to drug treatment protocols and clinical practice guidelines
- evaluation of clinical trials that validate treatment usefulness
- application of evidence-based decision making to patient care
- drug monitoring for positive and negative outcomes
- diagnostic tests in the diagnosis, staging, and monitoring of various disease states
- concepts of pain management and palliative care
- promotion of wellness and nonpharmacologic therapies
- disease prevention and monitoring
- nonprescription drug therapies
- dietary supplements
- design of patient-centered, culturally relevant treatment plans
- drug-induced disease

### Pharmacist-Provided Care for Special Populations

- pathophysiologic and pharmacotherapy alterations specific for special population patients (e.g., pediatric, geriatric, pregnant, cystic fibrosis, sickle cell anemia, celiac disease, genetic disorders, and others) for prescription and nonprescription medications
- dosage calculation and adjustments in special-population patients
- drug monitoring for positive/negative outcomes in special-population patients

### Drug Information

- fundamentals of the practice of drug information
- application of drug information skills for delivery of pharmaceutical care
- technology of drug information retrieval for quality assurance
- the ability to judge the reliability of various sources of information

### Medication Safety

- causes of medication errors/systems approaches

- human factors in errors
- strategies for reducing errors
- pharmacy leadership in medication safety

#### Literature Evaluation and Research Design

- fundamentals of research design and methodology
- principles of evaluation of the primary literature
- practical implications of the primary literature
- principles of research design and analysis in practicing evidence-based pharmacy

#### Patient Assessment Laboratory

- obtaining a comprehensive patient history
- familiarity with basic assessment techniques (inspection, palpation, percussion, auscultation), terminology, and the modifications caused by common disease states and drug therapy
- triage and referral skills
- knowledge of therapeutic drug concentrations and their interpretation
- knowledge of the basis for common clinical laboratory values and diagnostic tests and the influences of common disease states
- false positive and false negative results
- OTC point-of-care testing devices (e.g., glucometers, pregnancy tests, home testing for HbA1c, drug screening)
- principles of electrocardiography and common EKG abnormalities
- advanced cardiac life support

#### Elective Courses

• Multiple opportunities should be provided throughout the curriculum for students to take course work designed to develop areas of personal interest, to expand their understanding of professional opportunities, and to achieve the outcomes of the curriculum.



**ACPE Curriculum Standards 2007**

**STANDARDS FOR CURRICULUM**

Standard No. 9: The Goal of the Curriculum

Standard No. 10: Curricular Development, Delivery, and Improvement

Standard No. 11: Teaching and Learning Methods

Standard No. 12: Professional Competencies and Outcome Expectations

Standard No. 13: Curricular Core—Knowledge, Skills, Attitudes, and Values

Standard No. 14: Curricular Core—Pharmacy Practice Experiences

Standard No. 15: Assessment and Evaluation of Student Learning and Curricular Effectiveness

**STANDARDS FOR CURRICULUM**

*The purpose of the standards in this section is to ensure that the college or school's curriculum provides a thorough foundation in the biomedical, pharmaceutical, social/behavioral/administrative, and clinical sciences and prepares graduates with the competencies needed to enter and contribute to the profession of pharmacy throughout their career. Desired curricular content, organization, sequencing, and outcomes, and the type and character of practice experiences needed, are described. In addition, the methods of promoting student learning and development of lifelong learning skills and the need to use assessments to measure, evaluate, and improve student learning and effectiveness are stated. As recommended by the Institute of Medicine for all health care professionals, pharmacists must be educated to deliver patient-centered care as members of an interprofessional team, emphasizing evidence-based practice, quality improvement approaches, and informatics.*

**Standard No. 9: The Goal of the Curriculum**

The college or school's professional degree program curriculum must prepare graduates with the professional competencies to enter pharmacy practice in any setting to ensure optimal medication therapy outcomes and patient safety, satisfy the educational requirements for licensure as a pharmacist, and meet the requirements of the university for the degree.

The curriculum must develop in graduates knowledge that meets the criteria of good science; professional skills, attitudes, and values; and the ability to integrate and apply learning to both the present practice of pharmacy and the advancement of the profession. Graduates must be able to identify and implement needed changes in pharmacy practice and health care delivery.

**Standard No. 10: Curricular Development, Delivery, and Improvement**

The college or school's faculty must be responsible for the development, organization, delivery, and improvement of the curriculum. The curriculum must define the expected outcomes and be developed, with attention to sequencing and integration of content and the selection of teaching and learning methods and assessments. All curricular pathways must have both *required* and *elective* courses

and experiences and must effectively facilitate student development and achievement of the professional competencies.

The curriculum for the professional portion of the degree program must be a minimum of four academic years or the equivalent number of hours or credits. The curriculum must include didactic course work to provide the desired scientific foundation, introductory pharmacy practice experiences (not less than 5% of the curricular length) and advanced pharmacy practice experiences (not less than 25% of the curricular length).

### **Standard No. 11: Teaching and Learning Methods**

The college or school, throughout the curriculum and in all program pathways, must use and integrate teaching and learning methods that have been shown through curricular assessments to produce graduates who become competent pharmacists by ensuring the achievement of the stated outcomes, fostering the development and maturation of critical thinking and problem-solving skills, meeting the diverse learning needs of students, and enabling students to transition from dependent to active, self-directed, lifelong learners.

### **Standard No. 12: Professional Competencies and Outcome Expectations<sup>11</sup>**

Professional pharmacist competencies that must be achieved by graduates through the professional degree program curriculum are the ability to:

1. Provide patient care in cooperation with patients, prescribers, and other members of an interprofessional health care team based upon sound therapeutic principles and evidence-based data, taking into account relevant legal, ethical, social, cultural, economic, and professional issues, emerging technologies, and evolving biomedical, pharmaceutical, social/behavioral/administrative, and clinical sciences that may impact therapeutic outcomes.
2. Manage and use resources of the health care system, in cooperation with patients, prescribers, other health care providers, and administrative and supportive personnel, to promote health; to provide, assess, and coordinate safe, accurate, and time-sensitive medication distribution; and to improve therapeutic outcomes of medication use.
3. Promote health improvement, wellness, and disease prevention in cooperation with patients, communities, at-risk populations, and other members of an interprofessional team of health care providers.

These professional competencies must be used to guide the development of stated student learning outcome expectations for the curriculum. To anticipate future professional competencies, outcome statements must incorporate the development of the skills necessary to become self-directed lifelong learners.

### **Standard No. 13: Curricular Core—Knowledge, Skills, Attitudes, and Values**

To provide the thorough scientific foundation necessary for achievement of the professional competencies, the curriculum of the professional degree program must contain the following:

- biomedical sciences

- pharmaceutical sciences
- social/behavioral/administrative sciences
- clinical sciences

Knowledge, practice skills, and professional attitudes and values must be integrated and applied, reinforced, and advanced throughout the curriculum, including the pharmacy practice experiences.

#### **Standard No. 14: Curricular Core—Pharmacy Practice Experiences**

The college or school must provide a continuum of required and elective pharmacy practice experiences throughout the curriculum, from introductory to advanced, of adequate scope, intensity, and duration to support the achievement of the professional competencies presented in Standard 12.

The pharmacy practice experiences must integrate, apply, reinforce, and advance the knowledge, skills, attitudes, and values developed through the other components of the curriculum. The objectives for each pharmacy practice experience and the responsibilities of the student, preceptor, and site must be defined. Student performance, nature and extent of patient and health care professional interactions, where applicable, and the attainment of desired outcomes must be documented and assessed.

In aggregate, the pharmacy practice experiences must include direct interaction with diverse patient populations in a variety of practice settings and involve collaboration with other health care professionals. Most pharmacy practice experiences must be under the supervision of qualified pharmacist preceptors licensed in the United States.

#### **Standard No. 15: Assessment and Evaluation of Student Learning and Curricular Effectiveness**

As a component of its evaluation plan, the college or school must develop and carry out assessment activities to collect information about the attainment of desired student learning outcomes. The assessment activities must employ a variety of valid and reliable measures systematically and sequentially throughout the professional degree program. The college or school must use the analysis of assessment measures to improve student learning and the achievement of the professional competencies. The college or school must systematically and sequentially evaluate its curricular structure, content, organization, and outcomes.

## Addendum C

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### Faculty Accomplishments/Recognitions 2006-2010

#### **Teresa Bailey (Klepser), Pharm.D., BCPS**

Award:

Promoted to Professor of Pharmacy Practice. 2008.

Invited presentations:

Pharmacology Review presented at Western Michigan University's Physician Assistant Certification and Recertification Exam Review, Kalamazoo, Michigan, August, 2006.

Dietary Supplements: Interactions with Drugs presented at the 37<sup>th</sup> Annual WMSHP Spring Seminar, Grand Rapids, Michigan, May, 2006.

Dietary Supplements Used in Persons with Developmental Disabilities presented at the 22<sup>nd</sup> Annual Developmental Disabilities Conference, East Lansing, Michigan, April, 2006.

Men's and Women's Health presented at the ACCP Pharmacotherapy Preparatory Course, Monterey, California, April, 2006.

Ambulatory Care presented at the ACCP Pharmacotherapy Preparatory Course, Monterey, California, April, 2006.

Women's Health Workshop presented to the Pharmaceutical Society of Singapore, Singapore, November, 2005.

Managed Care Pharmacy in the US presented to the Pharmaceutical Society of Singapore, Singapore, November, 2005.

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#### **Jodie Elder (Bakus), Pharm.D., BCPS**

Appearance:

Television appearance on GRTV 25 Time to Talk – Pharmacy and Your Health, Grand Rapids, MI, January 17, 2006.

Elder (Bakus) Cont.

Award:

Received the Michigan Pharmacists Association Distinguished Young Pharmacist Award 2007.

Invited Presentation:

Calculations and Case Studies, A NAPLEX Review presented to Rite Aid pharmacy interns, Lansing, MI, December 7th, 2006.

Lipid-lowering Drugs, Diabetes Agents and Thyroid Medications presented to Western Michigan University Pharmacology students, Kalamazoo, MI, October 24, 2006 .

Cardiovascular Risk Assessment and Screening presented with Dr. Kenyetta Nesbitt at the Michigan Pharmacists Association Annual Convention and Exposition Meeting, Dearborn, MI, February 17, 2006.

Presentations:

A Pharmacist's Guide to Commonly Used Herbals - Indications and Interactions presented at the 57th Annual Pharmacy Seminar, Big Rapids, MI, April 6, 2010.

Right up there with Chicken soup: Herbal Use in the United States an ACPE accredited presentation, presented at Michigan Pharmacists Association Annual Convention and Exposition, February 28, 2010.

Glucose Toxicity and Basal/Bolus Insulin Dosing: The Argument for Aggressive Treatment presented to Metro Health Family Practice Residents at Family Practice Didactics, Grand Rapids, MI, January 2010.

Publication:

Mason NA, Bakus JL. Strategies for Reducing Polypharmacy and other Medication Related Problems in Chronic Kidney Disease. Seminars in Dialysis 2010, Jan-Feb; 23(1):55-61.

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## **Rose Baran, B.S., M.A., R.Ph.**

Appointment:

Appointed to the MPA Budget Committee for 2008.

Appointed to the Blue Cross Blue Shield Blue Care Network of Michigan Pharmacy and Therapeutics Committee 2006.

Michigan Pharmacists Association Task Force on Administrative Rules 2006.

Attended:

Attended the National Association of Boards of Pharmacy (NABP) North American Pharmacist Licensure Examination (NAPLEX) Item Writing Workshop, April 18-19 2008.

Award:

Lester E. Hosto Inspector Distinguished Service given by the National Association of Boards of Pharmacy-2005-2006, San Francisco, CA, April 11, 2006.

Baran Cont.

Honor:

Inducted into the Michigan Pharmacists Association Pharmacy Hall of Honor for volunteer leadership in service to the association at the 2008 MPA Annual Convention and Exposition.

Invited Presentation:

Pharmacy Regulatory Update, presented at the MPA Upper Peninsula Division Fall Seminar, Marquette, MI, October 3, 2009.

Pharmacy Practice Regulatory Update presented at the Spartan Stores Conference, Mt. Pleasant, MI, September 24, 2009.

Pharmacy Regulatory Update presented to SMSHP technicians at the SMSHP Technician Seminar, Novi, MI, June 6, 2009.

Pharmacy Regulatory Update presented to Western Michigan Society of Health Systems Pharmacists at the 40th Annual WMSHP Spring Seminar, Grand Rapids, MI, May 20, 2009.

Pharmacy Practice Regulatory Update at the Michigan Pharmacists Association Annual convention and Exposition, February 28, 2009.

Pain Management: Rush to Judgment vs. Compassion at the Michigan Pharmacists Association Annual convention and Exposition, February 28, 2009.

Pharmacy Law & Legislative Update. Sponsored by: Michigan Center for Rural Health and Michigan Pharmacists Association, December 11, 2008.

Pharmacy Law Refresher presented at the MPA Annual Convention and Exposition, February 29, 2008.

Unusual Pharmacy Law Questions presented at the Michigan Pharmacists Association Grand Escape, Mackinaw Island, MI, September 24, 2006.

Board of Pharmacy Inspections presented at the Michigan Pharmacists Association's Annual Convention & Exposition, Dearborn, MI, February 18, 2006.

Presentations:

State and Federal Regulatory Changes in Pharmacy Practice for the Spartan Annual Conference, Soaring Eagle Resort, MI, September 25, 2008

Service:

Volunteered for H1N1 Mass Vaccination Clinic. Ingham County, Lansing, MI, November 5, 2009.

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## **Jeffrey Bates, Pharm.D.**

Award:

Received his Pharm.D. from Ferris State University; was recertified as a Certified Geriatric Pharmacist, Big Rapids, MI, November 2007.

Bates Cont.

Pharmacy-Based Vaccine Administration Certification from APhA/MPA, 2008.

Promoted to Assistant Professor of Pharmacy, 2008.

Presentations:

Community Pharmacist Interventions in the Elderly presented at the Michigan Pharmacist Association, ACE, 2008.

What's Typical and Not So Typical About the Atypicals presented at two nursing homes, 2008.

Using Quality Measures to Guide the Care of the Elderly presented at the FSU College of Pharmacy Annual Spring seminar, Big Rapids, MI, 2008.

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## **Allison Bernknopf, Pharm.D.**

Acknowledgement:

Dr. Bernknopf was recognized for her contributions to the organization and the profession of pharmacy by the American College of Clinical Pharmacy (ACCP) on their website and in the ACCP Report, 2009.

Award:

The Exemplary Online Course Award/Mixed Delivery awarded to Drs. Wellman and Bernknopf from Ferris State University for the DI course, 2007.

Invited Presentations:

Developing a Hybrid On-line Drug Information Course presented at the Spring ACCP meeting as part of the DI PRN Focus Session. Memphis, TN 2007.

Using Popular Games to Teach Statistics presented at the Spring ACCP meeting as part of the DI PRN Focus Session, Memphis, TN, 2007.

Poster Presentation:

The Impact of a Pharmacist-Assisted Anticoagulation Protocol on INR Control in a Family Medicine Residency Program presented with Dr. Edick at the Spring ACCP meeting, Memphis, TN, 2007.

Presentations:

Statistics Review presented for the clinical pharmacists and residents at the Battle Creek VA, Battle Creek, MI, November 13, 2009.

Creating an Active Learning Environment Using Voting, Competition, and Incentives presented at the Lilly Conference on College & University Teaching, Traverse City, MI, September 24, 2009.

Using Multiple Choice Questions to Assess Students' Learning co-presented with Clifton Franklin at Ferris State University's new faculty orientation week, Big Rapids, MI, August 2009.

Selecting an Appropriate Sunscreen Agent to Protect Against Skin Cancer: An Update on the Newer Sunscreen Agents presented at the MPA meeting, 2008.

Bernknopf Cont.

Round-table on Drug Information as part of the Student Session titled: Off and Running to a Specialty Career presented at the ACCP annual meeting, Louisville, KY, October 2008.

Publication:

Bernknopf AC, Karpinski JP, McKeever AL, Peak AS, Smith KM, Smith WD, Timpe EM, Ward KE. Drug info: From Education to Practice. Pharmacotherapy. 2009; 29(3):331-46.

Bernknopf A. STEPS: aliskiren (teckturna) for the treatment of hypertension. American Family Physician. 2007;76(8):1-2.

Service:

Served as a faculty advisor (with Heather VandenBussche) for Operation Diabetes blood glucose/blood pressure screening event held at Meijer Pharmacy in Portage, MI, December 4, 2006.

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## **Tracey Boncher, Ph.D.**

Award:

Awarded tenure from FSU and promoted to Associate Professor of Medicinal Chemistry, 2008.

Funding:

\$2500 in funding for the 4th annual America's Promise/CVS Pharmacy/FSU science camp, Big Rapids, MI, June 2007.

American Chemical Society SEED Grant for \$2275.00 with \$600.00 matching funds from FSU Minority Affairs; 3<sup>rd</sup> annual America's Promise/CVS Pharmacy/FSU Science Camp, Big Rapids, MI, 2006.

Grants:

\$2500 for CVS Pharmacy/FSU/America's Promise Summer Science Camp, 2008.

Received grant \$2500 to fund seven high school students (Rockford and Creston High School) to participate in the CVS Pharmacy, America's Promise and Ferris State Summer Internship Program, 2007.

American Chemical Society SEED grant (May 2006) to give an underprivileged High School students opportunities to explore careers in science specifically, chemistry and pharmacy, 2006.

Invited Presentations:

New innovative ways to teach chemistry to students presented at the Lilly North 2006 teaching conference, Traverse City, MI, September, 2006.

Poster Presentations:

Teaching and Keeping Students Engaged in Chemistry by Giving Them Hands on Experience presented at the Lilly North Conference, Traverse City, MI, September 2006.

Parkinson Drug Pipeline: Promise and Progress presented at the fall FSU College of Pharmacy Continuing Education Seminar, Big Rapids, MI, November 2006.

Publications:



Boncher Cont.

Project SEED Helps Nurture Future Chemists, FSU Crimson and Gold, Spring 2007.

T. Boncher, X. Bi, S. Varghese, R.A. Casero, Jr and P.M. Woster. Polyamine-Based Analogues as Biochemical Probes and Potential Therapeutics *Biochem Soc Trans* 2007; 35(2): 356-63.

Polyamine-Based Analogues as Biochemical Probes and Potential Therapeutics, accepted for publication into the *Biochemical Society Transactions Journal*, November 2006.

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## **Michael Bouthillier, PharmD**

### Award:

The Internal Medicine Resident Clinic's compliance with the 2002 Updated Beers Criteria and evaluation of quality improvement strategies, 2009.

### Presentation:

The Internal Medicine Resident Clinic's compliance with the 2002 Updated Beers Criteria and evaluation of quality improvement strategies, research presented at the 2009 Gramec Research Day by Jennifer Gerardin MD won the Internal Medicine Best Research Presentation. Mike Bouthillier is the co-investigator for the project, 2008.

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## **Jill Coveyou, Pharm.D.**

### Invited Presentation:

Fear and Loathing in the Media: Making Sense of Bad Reporting presented at the Bay Med Didactic Lecture Series, 2008.

What a Pain!: Pain Management in the Community presented to the Bay Med residents, interns, and medical students, 2008.

Nursing Pain Management presented at the Bay Med Nursing Lecture Series as part of a CE lecture series for RNs, Bay Med, June 18, 2007.

### Presentations:

Toward and Untoward Cardiovascular Effects: If it's on TV it MUST be true! presented at the Ferris Fall Seminar along with a breakout session focusing on how to talk to patients about the adverse effects of Avandia and Chantix, 2008.

How to Give a Presentation -Or- How To Not Look Bad When Talking To People presented to attendings, residents, interns, medical students, and pharmacy students as part of the Bay Med didactic lecture series 2009.

### Publication:

Hyponatremia associated with escitalopram *NEJM*, letter to the editor, January 4, 2007.

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## **Adnan Dakkuri, Ph.D.**

### Awards:

2007 FSU Distinguished Service Award for his significant contributions in faculty and student development, curriculum and instructional programming and service to the discipline and profession.

Receipt of a sabbatical leave for the spring semester to teach and do research at the University of Jordan in Amman, Jordan 2007.

### Invited Presentations:

Elements of Critical Thinking presented in a one-day workshop, Critical Thinking for Educators, Mott Community College, Flint, MI, February 2006.

The Significance and Relevance of the Placebo Effect in the Drug Approval Process. presented at the Jamia Hamdard and Delhi Institute of Pharmaceutical Sciences and Research. New Delhi, India and at the Jordan University of Science and Technology Irbid, Jordan, May 2006.

### Poster Presentation:

presented a poster on critical thinking at the Lilly Conference-North, Traverse City, MI, October 2007.

### Service:

Served as a reviewer of abstracts submitted to the Pharmaceutics and Drug Delivery Section of the American Association of Pharmaceutical Scientists for the Annual Meeting, November 2007.

Attended the annual meeting of the American Association of Pharmaceutical Scientists, Nashville, TN, November 2005.

Attended the mid-year meeting of the American Association of the Colleges of Pharmacy as an alternate delegate, San Antonio, TX, March 2005.

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## **Cambria DeHoag, Pharm.D.**

### Award:

Promoted to Professor of Pharmacy Practice, 2008.

Received the Michigan Campus Compact Faculty/Staff Community Service-Learning Award, Big Rapids, MI, 2005.

### Presentation:

Update on Pharmacy Experiential Education: News and Issues at the McPEP (Michigan Colleges of Pharmacy Experiential Programs) presented at a preceptor development meeting associated with the MPA's Annual Convention and Exposition, 2009.

## **Margaret de Voest, Pharm.D.**

### Abstract:

Inter-disciplinary ACLS simulation accepted for publication at the Society of Simulation in Healthcare, 2008.

### Grant:

Ferris State University Professional Development Grant Investigation of the role of medical simulation to enhance learning in the pharmacy curriculum awarded May 2006.

### Invited Poster Presentation:

Pregabalin Associated Neurological Changes: A Case Study Series presented in collaboration with Dawn Currie(P4 student) and Dr. Paul Thill at ASHP, 2008.

### Invited Presentation:

Dealing with Difficult Students presented to resident director, preceptors and residents at the 4th Annual MSHP Residency Conference, Okemos, MI. June 1, 2009.

Getting to the Heart of Medication Counseling presented at the Matters of the Heart conference, Grand Valley State University, February 20, 2009.

A pharmacist's role in medication reconciliation presented at MPA ACE meeting, Dearborn, MI, February 24, 2007.

### Poster Presentations:

Poster presented at GR MERC's research day entitled Inter professional ACLS simulation, Grand Rapids, MI, 2008.

Assessment of dextrose 50% for hypoglycemia in the MICU Time required for pharmacists intervention with medication reconciliation presented at the ASHP Midyear Clinical Meeting, Anaheim, CA, December 6, 2007.

### Presentations:

Conversation on Interprofessional Simulation at the International Conference for Simulation in Healthcare with Andrew Booth, GVSU and Deb Bambini, GVSU RN/NP. Phoenix, AZ. January 26, 2010.

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## **Stephen Durst, Pharm.D., Associate Dean/Department Head**

### Poster Presentation:

Two-Year Experience with a University-based Inter-professional Diabetes Clinic in a Rural Community presented with colleagues from the Michigan College of Optometry and The College of Allied Health Sciences at the AACP Annual Meeting, San Diego, CA, July 2006.

Durst Cont.

Publication:

American College of Clinical Pharmacy White Paper. Essential Components of a Faculty Development Program for Pharmacy Practice Faculty. Eric G. Boyce, Pharm.D., Jill S. Burkiewicz, Pharm.D., Mark R. Haase, Pharm.D., Eric J. MacLaughlin, Pharm.D., Alissa R. Segal, Pharm.D., Eunice P. Chung, Pharm.D., Lingtak-Neander Chan, Pharm.D., Raylene M. Rospond, Pharm.D., Joseph A. Barone, Pharm.D., Stephen W. Durst, Pharm.D., and Barbara G. Wells, Pharm.D. (Pharmacotherapy 2008;28(10):245e-268).

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**Jennifer Hagerman, Pharm.D.**

Abstract:

Hagerman JK, Ahmed N, Delgado VJ, Klepser ME. Development and implementation of a virtual chart case series. American Association of Colleges of Pharmacy at the Annual Meeting, San Diego, CA, 2006.

Award:

Michigan Pharmacist Association's Distinguished New Pharmacist Practitioner award, February 2009.

Promoted to Associate Professor of Pharmacy Practice, 2008.

Grant:

Ferris State University Professional Development Grant. Examining student satisfaction with an interactive, case-based assessment tool to be implemented in the Pharmacy curriculum. Hagerman JH, Klepser ME. Awarded May, 2006.

Grant Recognition:

Klepser M, Hagerman J, Klepser D, Knechtel S. Evaluation of a Community Pharmacy-Based Influenza Screening and Management Program versus Pharmacy Screening and Referral to Standard of Care. Gilead Supported Grant. Funding Awarded: \$86,312.50. 2008.

Invited Presentations:

Asthma Management: Goals, Guidelines and Good Technique presented to the Midland County Pharmacists Association, Midland, MI, April 23, 2009.

Medication Safety: Anticoagulation Management Program presented at the Medical and Surgical Nurses Workshop, Hurley Medical Center, Flint, MI, April 2, 2009 and June 7, 2009.

Asthma Pharmacology Back to School Training for School Nurses in the Genesee Intermediate School District. presented at GISD. Flint, MI, August 26, 2008.

Asthma Medications Part of the Asthma Information Review (AIR) Course presented at St John Macomb Hospital, Warren, MI, August 5, 2008; Hurley Medical Center, Flint, MI, June 16, 2008.

Influenza: Antiviral Pharmacology presented at the MPA Annual Convention and Exposition, March 1, 2008.

Influenza: Vaccine Immunology presented at the MPA Annual Convention and Exposition, March 1, 2008.

Hagerman Cont.

Basic Introduction to Cardiac Pharmacology Important Implications for Nurses Virtual Telemetry Monitoring Workshop, Hurley Medical Center, Flint, MI, April 17, 2007 and October 25, 2007.

Thyroid Disease: News, Lawsuits, Recalls and the Latest Controversies presented at the MPA ACE meeting, Dearborn, MI, February 24, 2007.

Medication Management: Errors and Calculations presented to the Medical and Surgical Nurses Workshop I, Hurley Medical Center, Flint, MI, January 18, 2006.

Medication Management Update: New Drugs and Medication Administration Policies presented to the Medical and Surgical Nurses Workshop II, Hurley Medical Center, Flint, MI, February 1, 2006.

Medication Management: Errors and Calculations presented at the Medical and Surgical Nurses Workshop I, Hurley Medical Center, Flint, MI, January 18, 2006.

Medication Management Update: New Drugs and Medication Administration Policies presented at the Medical and Surgical Nurses Workshop II, Hurley Medical Center, Flint, MI, February 1, 2006.

Introduction to Clinical Pharmacology: Important Nursing Implications presented to Medical-Surgical Nurses at the Virtual Telemetry Monitoring Workshops, Hurley Medical Center, Flint, MI, May 10, May 17, May 24, May 31, and June 7.

Poster Presentation:

Hagerman J, Skinner J, Modawi I, Ahmed K, Aykroyd L, Hagerman J, Mersfelder T. An Evaluation of an Interviewing Workshop for Pharmacy Students: Preparation of a Quality Curriculum Vitae and Interviewing Techniques presented at the American Association of Colleges of Pharmacy (AACP) annual meeting, Boston, MA, July 20, 2009.

Schulz KM, Hagerman JK, Klepser ME. Evaluation of Pharmacists' Knowledge on Influenza presented at the American Association of Colleges of Pharmacy (AACP) annual meeting, Boston, MA, July 19, 2009.

Engle E, Hagerman J, Klepser ME. Students' Perceptions about Influenza Today; An Influenza Survey Study presented at the American Association of Colleges of Pharmacy (AACP) annual meeting, Boston, MA, July 19, 2009.

Paul N, Hagerman J, Staat D. Evaluating Stress Ulcer Prophylaxis Prescribing Practices on General Medical Floors presented at the American College of Physicians-Michigan Chapter Scientific Meeting, Dearborn, MI, September 12, 2008.

Impact of Pharmacy Student Interventions during Internal Medicine Rotations at Three Michigan Teaching Institutions presented at the American Association of Colleges of Pharmacy Meeting, Chicago, IL, July 20, 2008.

Hagerman J, Skinner J, Modawi I, Ahmed K. Evaluating Stress Ulcer Prophylaxis Prescribing Practices on General Medical Floors presented at the Flint Area Medical Education Research Forum, Flint, MI, April 2008.

Hagerman Cont.

Presentation:

Asthma Management: Goals, Guidelines and Good Technique presented at the Michigan Pharmacists Association Annual Convention and Exposition, February 28, 2009.

Blood pressure medications presented at Resources United to Help as part of the Hypertension & Stroke Prevention Program, Flint, MI, May 30, 2007.

Publications:

Mourad RE, Hagerman JH. Management of Stable COPD. US Pharmacist. January 2009.

Klepser ME, Hagerman J. Virtual Case Series: Community Acquired Pneumonia. Published electronically on AccessPharmacy. September 28, 2007.

Hagerman J, Knechtel S, Klepser M. Tobramycin solution for inhalation in cystic fibrosis patients: a review of the literature. Expert Opinion on Pharmacotherapy. March, 2007

Hagerman JK, Hancock KE, Klepser ME. Aerosolized antibiotics: A critical appraisal of their use. Expert Opinion on Drug Delivery. 2006;3:71-86.

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## **Kim Hancock, Ph.D., R.Ph.**

Attended:

Attended Vista 4 Certification training and passed certification exam, July 2006.

Attended WebCT National Meeting, Chicago, IL, July 2006.

Grants:

Co-wrote a grant with Dr. Gregg Potter and Dr. Jeffrey Bates: \$6880 from Ferris Foundation for proposal entitled Diabetes and cardiovascular screening services for indigent patients in Mecosta County, 2008.

Received a Faculty Research Grant for \$4,399.00 - Determining the time to uniform mix using three mixing methods used by compounding pharmacists and the influence on content uniformity of compounded capsules. Grant received May 2006.

Presentations:

Exubera® Inhaler presented at the fall FSU College of Pharmacy Continuing Education Seminar, Big Rapids, MI, November 2006.

Publications:

Hagerman JK, Hancock KE, Klepser ME published an article titled: Aerosolized antibiotics: a critical appraisal of their use in the journal Expert Opinion on Drug Delivery, January 2006.

Service:

Appointed to FSU Strategic Planning Resource Council, 2007.

Invited to the National Association of Boards of Pharmacy Foreign Pharmacy Graduate Equivalency Examination Item Writing Workshop, Mount Prospect, IL, April 27-29, 2007.

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## **Kierstan Hanson, PharmD**

### Acknowledgement:

Became BCPS certified, 2010.

### Presentation:

Treatment for Fibromyalgia: Hope or hype? presented at the MPA ACE meeting and two sections of the presentation at Sparrow Hospital presented to pharmacists, 2009.

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## **John P. Jameson, Pharm.D.**

### Article:

Baty, J. and Jameson, J. Pharmacists Collaborative Management of Poorly Controlled Diabetes Mellitus: A Randomized Controlled Trial, 2009.

### Invited Presentation:

Pharmacist Management of Poorly Controlled Diabetes versus Usual Medical Care presented at the Michigan State Family Practice Research Day, May 22, 2008.

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## **Michael Klepser, Pharm.D., FCCP**

### Abstracts:

Klepser ME, Hagerman JK, Knechtel SA. Evaluation of a community pharmacy-based influenza screening and management program versus pharmacy screening and referral to standard of care. Seasonal and Pandemic Influenza. Washington, DC, 2009.

Hagerman JK, Ahmed N, Delgado VJ, Klepser ME. Development and implementation of a virtual chart case series. American Association of Colleges of Pharmacy Annual Meeting. San Diego, CA, 2006.

### Grants:

Evaluation of a community pharmacy-based influenza screening and management program versus pharmacy screening and referral to standard of care. Gilead Pharmaceuticals, \$86,312.50. September 2008.

Ferris State University Professional Development Grant. Examining student satisfaction with an interactive, case-based assessment tool to be implemented in the Pharmacy curriculum. Hagerman JH, Klepser ME - Awarded May, 2006.

### Invited Grant Reviewer:

National Institute of Allergy and Infectious Diseases Regional Centers of Excellence for Biodefense and Emerging Infectious Diseases. RFP-NIH-NIAID-DMID-08-002.

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Klepser Cont.

National Institute of Allergy and Infectious Diseases Broad Agency Announcement Development of therapeutic agents for selected biodefense bacterial diseases. BAA NIH NIAID-DMID-07-37.

Panel member for FSU Office of Sponsored Programs/Grants and Accounting program on the grant review process, 2009.

Invited Presentations:

Drug Interactions: Which Ones to Know and How to Manage presented to physicians, March 26, 2008.

Project to decrease flu cases First of its kind in nation to treat the flu. WOOD TV, February 6, 2009. Grand Rapids, MI [http://www.woodtv.com/dpp/news/Project\\_to\\_decrease\\_flu\\_cases](http://www.woodtv.com/dpp/news/Project_to_decrease_flu_cases) .

The rationale for inpatient immunization initiatives. 43rd American Society of Health-System Pharmacists Midyear Clinical Meeting, Orlando, FL, December 9, 2008.

Optimizing treatment of patients infected with influenza presented at the Department of Microbiology Grand Rounds, Mount Sinai School of Medicine, New York, NY, 2008.

Anatomy of a research project presented at the American College of Clinical Pharmacy Annual Meeting, Louisville, KY, November 18, 2008.

Pharmacy education a missed opportunity presented at the Virginia Commonwealth University School of Pharmacy, Richmond, VA, July 9, 2007 and at the University of Colorado School of Pharmacy, Denver, CO, September 24, 2007.

Antifungal Agents: A review of pharmacology, pharmacokinetics/pharmacodynamics, and clinical efficacy of available and investigational agents presented at the Interscience Conference on Antimicrobial Agents and Chemotherapy Workshop, Chicago, IL, September 16, 2007.

Pharmacology of systemic antifungal agents presented as part of the Move on Mycoses Series at the Barnes-Jewish Hospital, St. Louis, MO, July 19, 2007.

Antimicrobial Stewardship – putting the IDSA position statement into practice presented at the Sixth Annual Great Lakes Pharmacy Infectious Diseases Conference, Grand Rapids, MI, March 24, 2007.

Making sense of the antifungal pharmacopoeia presented to physicians and pharmacists, Chicago, IL, November 6, 2006 and Boston, MA, November 3, 2006.

Assessing the impact of anti-infectives on the cost of healthcare. Value of Medicines: a focus on anti-infectives presented for pharmacists, Chicago, IL, August 14, 2006.

Health economics of invasive fungal infections. The Front-line Smart Strategies for Invasive Fungal Infections presented to pharmacists, physicians, and microbiologists. Atlanta, GA, June 13, 2006.

Pneumonia: captain of the men of death presented to physicians and nurses at the Westside Medical Clinic, Kalamazoo, MI, May 15, 2006.



Klepser Cont.

Presentation:

Anatomy of a research project presented at the American College of Clinical Pharmacy Annual Meeting, Louisville, KY, November 18, 2008.

Publications:

Kemink SM, Mersfelder TL, Klepser ME. Community-acquired MRSA infections. *Drug Topics*. 2009.

Klepser ME, Matzke GR, Vivian E, Granberry M, Majerus T, Wiggins B, Hill-Zabala C, Weimert N, Rabel MA. Ethical issues related to clinical, translational and health system research. *Pharmacotherapy*. 2008; 28:229-43.

Frei CR, Oranasionwu CU, Mohr JF, Klepser ME, Barner JC. Vaccine adherence and perceptions among infectious diseases pharmacists. *AJHP*. 2008; 65:1500-1.

Amphotericin B resistance: mechanisms, epidemiology, and clinical relevance. *J Invasive Fungal Infect*. 2007;1:93-8. Knechtel SA, Klepser ME; Safety of aerosolized amphotericin B. *Expert Opin Drug Saf*. 2007;6:523-32. Knechtel SA, Klepser ME; Telavancin: A novel lipoglycopeptide antibiotic with dual mechanisms of action. *Formulary*. 2007;42:545-57. Knechtel SA, Jacobs C, Klepser ME.

Klepser ME. Candida resistance and its clinical relevance. *Pharmacotherapy*. 2006; 26(6 Pt 2):68S-75S.

Blostica TM and Klepser ME. Dalbavancin a novel long-acting lipoglycopeptide antibiotic. *Formulary* 2006;41:59-73.

Hagerman JK, Hancock KE, Klepser ME. Aerosolized antibiotics: A critical appraisal of their use. *Expert Opinion on Drug Delivery*. 2006;3:71-86.

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## **Renee Koski, Pharm.D.**

Appointment:

Elected President of the Upper Peninsula -Division of the Michigan Pharmacy Association for 2007.

Awards:

The local Association (UP-MPA) also received the Fred Arnold Public Relations Award and The Distinguished Local Association Achievement Award for activities that we did while I was UPMPA President, 2008.

Fellow of the Michigan Pharmacists Association Award, MPA ACE Meeting, March 1, 2008.

On behalf of the UP-Division of MPA, I accepted the Upper Peninsula Conservation Award at the Superior Watershed Partnership's Annual Meeting on February 7, 2008 for our involvement in the 2007 Earthkeepers Pharmaceutical Collection (we collected over 2000 pounds of expired medications - that now won't be flushed down the toilet or sink, including controlled substances that had a street value over 1/2 million dollars.)

Certification:

Passed the Certified Anticoagulation Provider (CACP) exam in December, notified in January 2007.

Koski Cont.

Grants:

Final report submitted to the grantor, Health Resources and Services Administration, a division of the U.S. Department of Health and Human Services, at the conclusion of the Anticoagulation Clinic, August 10, 2006.

Submitted an annual report to the grantor, Health Resources and Services Administration, a division of the U.S. Department of Health and Human Services for year-one of a three-year federal grant entitled: Managing Prescribing Cost and Quality Among Independent Health Care Entities, August, 2006.

Invited Presentations:

Prescription Writing 101 presented to new residents and medical students at MGH's New Resident and Medical Student Orientation, Marquette, MI, July 1, 2009.

A Career in Pharmacy presented to high school and college students participating in the AGES summer program presented at MGH for Area Geriatric Education Scholars, Marquette, MI, June 18, 2009.

Safety Review of Medications Associated with Suicidality presented to family medicine physicians, Marquette, MI, January 20, 2009.

Treatment of Hyperlipidemia presented to family medicine physicians, Marquette, MI, January 14, 2009.

Are All Statins Created Equal? presented to the outpatient cardiac care unit nurses, December 18, 2008.

RX for Change: Smoking Cessation presented at the UP MPA Meeting, Marquette, MI, November 8th, 2008.

Small Group Teaching and Precepting presented with Dean Van Loo to residents as part of the TLCP, September 10, 2008.

Internet Resources for Physician Offices presented to family medicine nurses, physicians, and staff, Marquette, MI, September 9, 2008.

Review of Anticoagulants presented to physicians, Marquette, MI, August 20, 2008.

Drug Class Review of Calcium Channel Blockers and Beta-Blockers presented to family medicine physicians, Marquette, MI, May 21, 2008.

Outpatient Cardiovascular Drugs presented to medical center nurses, Marquette, MI, May 20, 2008.

Anticoagulation Issues in the Elderly presented to nurses and social workers at a gerontology conference, Marquette, MI, February 28, 2008.

Review of Drugs Affecting the Renin-ANGiotensin-ALdosterone System presented to physicians, Marquette, MI, January 16, 2008 and to nurses on January 17, 2008.

Contemporary Treatment of Hyperlipidemia presented at the MPA Grand Escape, Mackinac Island, MI, August 26, 2007.

Koski Cont.

A review of oral antiplatelets presented to family medicine physicians at Marquette General Hospital, Marquette, MI, August 22, 2007.

Prescription Writing 101 presented to new medical residents/students, Marquette, MI, July 5, 2007.

Mentoring: Giving and Receiving presented at the Education and Training Networking Forum at the Spring ACCP meeting, Memphis, TN, April 23, 2007.

Drug Information Resources for Residents presented to family medicine physicians at MGH, Marquette, MI, March 28, 2007.

Are Antidepressants Safe in Youth Suicide? presented at the MPA ACE meeting, Dearborn, MI, February 25, 2007.

Exubera: the new inhaled insulin presented at the Iron County Medical Conference, February 22, 2007.

Inhalers, Spacers, and Peak Flow Meters presented to the MGH Family Medicine Physicians, Marquette, MI, February 20, 2007.

Endocrine Drugs presented to students in the Masters in Nursing (Family Nurse Practitioner Pharmacology Course, Marquette, MI, October 9, 2006.

Youth Depression, Antidepressants, and Suicide presented to school nurses at the Ramada Inn, Marquette, MI, October 5, 2006.

Cardiovascular Drugs presented to students in the Masters in Nursing (Family Nurse Practitioner Pharmacology Course, Marquette, MI, October 2, 2006.

Medications for Allergic Rhinitis presented to the family medicine physicians at Marquette General Hospital, Marquette, MI, August 8, 2006.

Review of New Anti-diabetic Medications presented to Marquette General Hospital Physicians, Marquette, MI, June 7, 2006.

Insomnia Medications presented to Marquette General Hospital Family Practice Residents, January 25, 2006.

Review of Bisphosphonates for Osteoporosis presented to Marquette area physicians, Marquette, MI, May 5, 2006.

Managing Migraines from a Pharmacist's Perspective presented at the Michigan Pharmacists Association Annual Convention and Exposition Annual Meeting, Dearborn, MI, February 18, 2006.

Migraine Medication Review presented to Family Medicine Doctors at MGH, Marquette, MI, January 24, 2006.

Antihypertensive Agents: They Make Me Dizzy presented to registered nurses throughout the Upper Peninsula (nine hospitals), Marquette, MI, December 12, 2005.

Koski Cont.

Other:

Teaching/taught 3 3 hour lectures to the NMU Masters in Nursing Class: 10/7 Cardiovascular Diseases #1 (HTN, Hyperlipidemia, Atrial fibrillation); 10/14 Cardiovascular Diseases #2 (CAD, VTE, CHF); 10/21 Endocrine Disorders (Diabetes, Thyroid), 2009.

Sat on panel with neurologist answering general questions about MS medications, 2009.

Presentations:

Drugs for Insomnia presented to physicians at MGH, Marquette, MI, January 13, 2010.

Endocrine Disorders presented Nursing Pharmacology Course to NMU graduate students at Northern Michigan University, Marquette, MI, October 21, 2009.

OTC Drug Interactions with MS Therapies presented at the National Multiple Sclerosis Society-Michigan Chapter Upper Peninsula Fall Conference, Marquette, MI, 2009.

Drug Class Review of Bisphosphonates presented to physicians, Marquette, MI, August 26, 2009.

Anticoagulation Review presented to physicians, Marquette, MI, August 21, 2009.

Publications:

Koski R, Covyeeou J, Morissette M. Case Report of SLADH Associated with Escitalopram Use. Journal of Pharmacy Practice 2009;22(6): 594-599.

Koski R, Rider-Becker J. Management of Painful Diabetic. Peripheral Neuropathy in the Elderly. US Pharmacist 2009; 34:30-8.

Omega 3 acid ethyl esters (Lovaza) for severe hypertriglyceridemia. Koski RR. P&T 2008 May;33:271-3,80-81.

Chapter entitled: Blood; Koski, R. Pharmacy Certified Technician Training Manual, 10<sup>th</sup> edition Michigan Pharmacists Association: Lansing, MI:p513-22;(2007)

Chapter entitled: Blood Disorders; Koski, R. Pharmacy Certified Technician Training Manual, 10th edition. Michigan Pharmacists Association: Lansing, MI:p523-38; (2007)

Pharmacists' perceptions of controlled substance abuse in the rural upper peninsula of Michigan Koski, R., JAPhA 2006;45:751-55. (Journal of American Pharmacists Association); (2007)

Practical review of oral antihyperglycemic agents for type 2 diabetes mellitus Koski, R., Diabetes Educ 2006;32:869-76. (The Diabetes Educator 2007)

Service:

Panelist for Ask the Diabetes Expert on Public TV13 with a physician and 2 other diabetes educators. June 25, 2009.

Staffed a booth at the Northern Michigan University Science Career Expo on November 7, 2007 in partnership with FSU students regarding Ferris State University College of Pharmacy and careers in pharmacy

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## **Robert Krueger, PhD**

### Acknowledgement:

Award Lectures Session Chair at the 50<sup>th</sup> Anniversary Meeting of the American Society of Pharmacognosy meeting, Honolulu June 27 – July 1, 2009.

Appointed Graduation Mace Bearer, 2009 Spring Graduation Friday May 8, evening ceremony.

Recipient of the 2009 FSU Distinguished Service Award.

Reappointed Grant Coordinator for the Wildflower Association of Michigan Glassen grant program for 2007-2009.

Elected First Vice-President of the Wildflower Association of Michigan. Spring 2008.

Selected as a nominee for the position of Vice-President of the American Society of Pharmacognosy. Spring 2008.

Receipt of a sabbatical leave for the fall semester of 2007 to join the Council on Responsible Nutrition in Washington DC as their botanical supplements expert, 2007.

### Activities/Service:

Moderator for two sessions of the 2010 Annual meeting of the Wildflower Assoc. of Michigan, Kellogg Center, East Lansing, March 7-8, 2010.

Assumed the presidency of the Wildflower Association of Michigan in April, 2010 with a 2 year term.

Continued service as a consultant to the Sinclair Institute, evaluating topical and oral products for safety and legality. Fall 2008- Fall 2009.

Quoted as an expert in the August 5, 2008 issue article of the GR Press Spice of Life: Many herbs are making a move to the Medicine Cabinet by P. R. Kopenkosky.

Hosted a medicinal plant garden tour for approx 12 Master Gardeners from Mecosta and Osceola counties, Big Rapids, MI, June 17, 2008.

Selected as a Field Reviewer for the ACPE CE Evaluation process.

Co-Chaired an awards session at the 7th joint meeting of AFERP, ASP, GA, PSE, and SIF in Athens, Greece. Chaired the meeting of the American Society of Pharmacognosy Foundation Board of Directors held during that conference, Athens, Greece, August 3-8, 2008.

Continued service as an expert witness for a federal court case in Phoenix involving dietary supplement companies, Spring 2008.

Sabbatical at the Washington, DC office of the Council for Responsible Nutrition during the fall 2007 semester.

Krueger Cont.

Served on the organizing committee for the 48th annual meeting of the American Society of Pharmacognosy held in Portland, ME.

Served as an expert witness in a Federal District Court case in Phoenix involving enzyme dietary supplements in early November of 2007.

Emceed the Awards luncheon during the Wildflower Association of Michigan's annual meeting, introducing the eight recipients of WAM-Glassen Foundation grants and presenting each with their award.(2006)

Served as a judge at the International Science and Engineering Fair held in Indianapolis representing the American Society of Pharmacognosy.(2006)

Appointments:

Reappointed treasurer of the ASPF for the 17<sup>th</sup> straight year, ASP annual meeting, August 2006.

Member of the organizing committee for the ASP annual meeting in 2007, to be held in Portland, ME.

Invited Lecture:

Native Plant Tea and Coffee Substitutes presented for the MI Audubon Labor Day Weekend, 2008 (40 attending).

Breast Cancer and Dietary Supplements Containing Phytoestrogens presented to the MCMC Breast Cancer Support Group, Sept 08, 2008.

Gave a tour of the Kazerovskis Medicinal Garden and Green House complex to the Big Rapids Garden Club, Big Rapids, MI, September 10, 2008.

Distributed 90+ copies of my sabbatical project entitled ACPE Curriculum Guide to Dietary Supplements to the AACP list of Colleges and Schools of Pharmacy, plus copies by request to other interested parties, Summer 2008.

Grant:

Awarded a Timme Travel Grant to support a workshop presentation with Dr. R. Friar entitled Understanding Labels and Advertisements for Products Promoting Sexual Health or 'What you read may not be what you get!' at the SSSS meeting, San Juan, Puerto Rico, November, 2008.

Book reviews:

Book review for J. Nat Prod: Molecules that Changed the World, by Nicolau and Montanen, submitted, accepted for publication March, 2010.

Book review submitted to J Natural Products: The Chemistry of Fragrances, from Perfume to Consumer, 2<sup>nd</sup> Edition accepted for publication March 2010.

Review published in the Journal of Medicinal Chemistry: Medical Toxicology of Natural Substances, Foods, Fungi, Medicinal Herbs, Plants and Venomous Animals. by D.G. Barceloux; in **J Med Chem**, 52, No. 8, 2628 (2009).

Krueger Cont.

Book review accepted for publication: Dyes from American Native Plants: A Practical Guide by L. Richards and R. Tyrl, for the **Wild Flower Association of Michigan Newsletter**.

Book review submitted to Economic Botany: The International Poisonous Plant Checklist by J. Wagstaff published in **Economic Botany**, 63(4), 446, 2009.

Book review accepted for the 2008/09 winter issue of the Wild Flower Association of Michigan newsletter: Down to Earth by Helen Dillon.

Chasing the Rain, My Treasure Hunt for the World's Most Beautiful Mushrooms. By L. Taylor in Economic Botany: 62(4) 640(2008).

Aminoglycoside Antibiotics for the J Med Chem; Chasing the Rain for the J Soc Econ Botany; An Introduction to Molecular Biotechnology for the J Nat Prod. Spring 2008.

Bioactive Natural Products: Detection, Isolation, and Structural Determination for the J Med Chem. Spring 2008.

Book review An Introduction to Molecular Biochemistry Published in the Journal of Natural Products  
Aminoglycoside Antibiotics: From Chemical Biology to Drug Discovery Published in the Journal of Medicinal Chemistry. Fall 2007.

Flavonoids: Chemistry, Biochemistry and Applications A book review edited by O.M. Andersen and K. Markham. in Economic Botany 61(1):101(2007).

Review of Medicinal Chemistry of Bioactive Natural Products in J Med Chem 49(11):3428-9(2006).

Review of Forensic Botany. Principles and Application to Criminal Casework published in the current issue of the Journal of Natural Products 69 (2) , 308 (2006).

Review of Medicinal Herbs. A Compendium by Koch and Tschirch published in Economic Botany 59(4): 407-408(2005).

#### Invited Presentations:

Michigan Native Plants, The Facts and Fallacies of their Medicinal Properties Presented at Meijer Gardens (Grand Rapids) to an assembly of GR Garden club members, Grand Rapids, MI, March 25, 2010.

Dietary supplements and your patient's oral health presented to dental health care professionals, Wheeling, WV, Oct 9, 2009.

Vitamins and your Health, what's New presented to the Rotary Club of Big Rapids, Big Rapids, MI, Oct 20, 2009.

SiRNA: Coming to Your Pharmacy Soon presented as part of the fall FSU College of Pharmacy Continuing Education Seminar, Big Rapids, MI, November 2006.

Michigan's Poisonous Plants presented at the Michigan Audubon Society's Cedar Campus (UP), September 2006.

Krueger Cont.

Poisonous Plants presented at the Meijer Gardens lecture/workshop, Grand Rapids, MI, July 2006.

Native Medicinal Plants presented to the combined greater Elgin (IL) garden clubs (#4), June 2006.

Botanical Aphrodisiacs: Facts and Fiction Co-presented with Dr. Robert Friar, to the 8th Congress of the European Society of Sexology, Prague, Czech Republic, June 4-6, 2006.

Herbal Remedies for Cardiac and Pulmonary Patients presented to the Michigan Society for Cardiovascular and Pulmonary Rehabilitation, Traverse City, MI, May 6<sup>th</sup>, 2006.

Native Michigan Medicinal Plants: Facts and Fantasies presented to over 150 participants, 2006.

A Baker's Dozen of Popular Medicinal Herbs presented as part of the Meijer Gardens 'A Healthy Fit' winter lecture series, Grand Rapids, MI, January 2006.

Interview:

Interviewed by the Grand Rapids Press and GVSU's NPR affiliate concerning medicinal herbs, 2006.

Presentations:

Dietary supplements and your Patients' Oral Health a 2 hour professional CE lecture to dental hygienists and other oral healthcare professionals, Muskegon Community College, April 16, 2009.

Grand Forum of GVSU, a one and a half hour lecture Dietary Supplement Savvy for the Senior Consumer, May 12, 2009.

Native Plant Coffee and Tea Substitutes presented at the Grass River Natural Area, July 23, 2009.

Native Michigan Medicinal Plants presented to the garden club of Fremont, Fremont, MI, Spring 2008.

Enzymes: Catalytic Engines of Life's Processes presented at the annual meeting of the Council for Responsible Nutrition, Fall 2007.

The Basics of Dietary Supplements and Your Health presented a lecture to the Grand Rapids Rotary Club, Grand Rapids, MI, April 12, 2007.

Aromatherapy: A Smell and Tell, Meijer Garden, Grand Rapids, MI, February 6, 2007.

Publications:

Coauthored a second chapter in The History of the American Society of Pharmacognosy entitled The University of Connecticut's Contributions to Modern Pharmacognosy, published in the spring of 2009.

Coauthored a chapter on the ASP Foundation with Dr. John Cassady for history text celebrating the 50<sup>th</sup> anniversary of the American Society of Pharmacognosy. (2008)



## **H. Stephen Lee, Pharm.D, M.S.**

### Attended:

Lilly Conference on College & University Teaching, Traverse City, MI, October 4-7, 2007.

### Awards:

APHA-APPM Contributed Papers Winner. presented for poster that was submitted to the APhA 2010 Annual Meeting, Washington, DC. March 2010.

### Invited Presentations:

Supplements: What's Right for You? presented at Covenant Village of the Great Lakes Medical Monday event, March 10, 2008.

Supplements for Women's Health and ABCs of Diabetes presented at West Michigan Women's Expo, March 7-9, 2008.

New Drug Update 2008 and Cardiovascular Risk Assessment and Screening Workshop Both presented at MPA-ACE, March 2, 2008.

Neuropharmacology presented to Grand Valley State University Doctor of Physical Therapy class, Fall 2007.

The Clinical Development and Use of Monoclonal Antibody as a Therapeutic Option for Psoriasis presented to the Departments of Chemistry and Biology at Eastern Michigan University Conference, Fall 2007.

New Drug Update 2007, presented with Dr. Gregg Potter at MPA ACE meeting, Dearborn, MI, February 25, 2007.

Community-acquired MRSA presented to faculty in the departments of Chemistry and Biology at Eastern Michigan University and in a separate session to Eastern Michigan University undergraduate and graduate students, February 20, 2006.

A Brief Introduction to the Pharmacy Profession presented to Eastern Michigan University Pre-pharmacy students, February 20, 2006.

What Exactly Do Pharmacists Do? presented to undergraduate and graduate students at Eastern Michigan University, February 20, 2006.

Community-acquired MRSA presented to physicians, physician assistants, and nurse practitioners of Hospitalists of West Michigan, April 25, 2006.

Levofloxacin, Ceftriaxone and Vancomycin: What Nurses Need to Know presented to Blodgett nursing staff and College of Nursing students, April 27, 2006.

### Presentation:

New Drug Update. presented at the MPA-ACE meeting, Detroit, MI, February 27, 2010.

Lee Cont.

New Drug Update 2009 at Northern Michigan Pharmacy Education & Suppliers Seminar, Grayling, MI, March 22, 2009.

New Drug Update 2008 presented with Dr. Jackie Morse at Spartan Stores annual conference, Mt. Pleasant, MI, September 2008.

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## **Elsie Lovsted, Ph.D.**

### Awards

Received a merit award. Spring 2007.

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## **Lisa Meny, PharmD**

### Presentations:

Medication Therapy Management: The Patient Focus presented at the MPA Annual Convention and Exposition, 2010.

MTM Business Blueprint: Building a Profitable MTM Practice presented at the MPA Annual Convention and Exposition, 2010.

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## **Tracey Mersfelder, Pharm.D., BCPS**

### Invited Presentation:

Not in the package insert presented at MPA, March 2008.

Neuropathic Pain presented to WMSHP, March 2008.

Evaluation of dexmedetomidine in patients suspected of alcohol withdrawal a poster presentation at SCCM, February 2008.

### Publication:

LaPlante KL, Mersfelder TL, Ward KE, Quilliam BJ. Prevalence of and risk factors for dysglycemia in patients receiving gatifloxacin and levofloxacin in an outpatient setting. *Pharmacotherapy* 2008;28:82-89.

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## **Jackie Morse, Pharm.D.**

### Invited Presentation:

Supplements: What's Right for You? presented at Covenant Village of the Great Lakes Medical Monday event, March 10, 2008.

Supplements for Women's Health and ABC's of Diabetes presented at the West Michigan Women's Expo, March 7-9, 2008.

New Drug Update 2008 Cardiovascular Risk Assessment and Screening Workshop. presented at the MPA-ACE, March 2, 2008.

### Other:

Became BCPS certified, December 2009.

Attended the Great Lakes Young Pharmacists Leadership Conference. Maumee Bay Resort and Conference Center, Oregon, OH, October 2 - 4, 2009.

Taught the Pharmacy-Based Immunization Delivery Training course coordinated by MPA. Lansing, MI. July 15 & 30, 2009. (with Dean Van Loo).

### Poster Presentation:

Mersfelder TL, **Morse JA**. Development of interactive, multimedia virtual cases for utilization in the pharmacy curriculum. presented at Lilly Teaching Conference, Traverse City, MI, September 24, 2009.

### Presentations:

New Drug Update. presented at the MPA-ACE meeting, Detroit, MI, February 27, 2010.

MTM demonstration and facilitated a roundtable discussion at Ferris Fall Pharmacy Seminar, Big Rapids, MI, October 2009.

### Publication:

Demonstration of community pharmacy and managed care organization collaboration on cardiovascular disease risk factor identification using health risk appraisal in Journal of the American Pharmacists Association (JAPhA), March/April 2009.

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## **Lucy Ngoh, Ph.D.**

### Presentations:

Presentation proposal, Rubrics Across the Curriculum: A Results of A Summer Workshop Submitted to the Writing Across the Curriculum Conference 2010, October 2009. Accepted (December 2009). Will be presenting the results of a summer workshop, along with other colleagues from the university at the Writing Across the Curriculum Conference 2010, Indiana University, Bloomington, IN, May 20-22, 2010.

Service Learning in Pharmacy Education: A Look at Health, It Determinants and Medication Use presented at the National American Democracy Project meeting, Philadelphia, PA, June 9, 2007.

Ngoh Cont.

The Acquisition and Utilization of Pharmaceuticals in Cameroon: Is an Ecological Model a good fix for the good of Public Health? presented at the Conference on Pharmaceutical Policy Analysis, Woudschoten Center Zeist, The Netherlands, September 19-21, 2007.

Health literacy: Pharmacists, patients and pharmacy employers working together to make a difference, Co- led a seminar with Dr. Caroline Gaither for The University of Michigan, Department of Social and Administrative Sciences graduate students and faculty, University of Michigan, Ann Arbor campus, June 28, 2007.

Service Learning in Pharmacy Education: A Look at Health, its Determinants, and Medication Use presented at the National American Democracy Project (ADP) Conference, Philadelphia, PA, June 7-9, 2007.

Integrating Academic Service-Learning into a course and student buy-in: A case in Pharmacy presented at The Institute: Service-Learning and Civic Engagement 11<sup>th</sup> Annual Conference, Livonia, MI, February 8-9, 2007.

Award:

Received a scholarship from the World Health Organization's Department of Medicines Policy and Standards to attend the Conference on Pharmaceutical Policy Analysis, Woudschoten Center Zeist, The Netherlands. 2007.

Selected as a participant in the Conference on Pharmaceutical Policy Analysis, September 19 - 21 2007.

Served as an Item writer (create examination questions) for the National Association of Boards of Pharmacy (NABP) Foreign Pharmacy Graduate Equivalency Examination (FPGEE), Mount Prospect, IL, October 26-28, 2007.

Reviews:

Reviewed a manuscript, Identification of barriers to appropriate dietary behavior and evaluation of their relative importance in indigent patients with type 2 diabetes mellitus, for the Journal of the American Pharmacists Association, November 2009.

Reviewed a manuscript, Beliefs underlying parents' views towards MMR promotion interventions: A qualitative study, for the Journal of Patient Education and Counseling, September 2009.

Reviewed a manuscript, Patient's need for choice and information across the interface between primary and secondary care: a survey, for the Journal of Patient Education and Counseling, May 2009.

Reviewed a manuscript, Unraveling the relationship between literacy, language proficiency, and patient-physician communication, for the Journal of Patient Education and Counseling, December 2008.

Reviewed a manuscript, Complex interventions to improve the health of people with limited literacy: A systematic review, for the Journal of Patient Education and Counseling, November 2008.

Reviewed abstracts for the Society for Public Health Education (SOPHE) 2009 Midyear Scientific Conference in my role as a planning committee member, May 2008.

Reviewed a revised manuscript, E-prescriptions – extent and reasons for primary non-compliance, for Research in Social & Administrative Pharmacy Journal, February 2008.

Ngoh Cont.

Reviewed a conference paper, Quality of Medicines in South Africa: The Consumers' Perspectives, for the Conference on Pharmaceutical Policy Analysis, September 19-21, 2007, Zeist, The Netherlands, June 2007.

Reviewed a revised manuscript, Service Learning: Survey of the Field: 1997 and 2003, for the Journal of Pharmacy Teaching, June 2007.

Reviewed a manuscript, Design, Development, and Evaluation of Pictographic Instructions for Medications for Use During Humanitarian Missions, for the Journal of Patient Education and Counseling, May 2007.

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### **Marc A. Nienhuis, Pharm.D.**

#### Award:

Recipient of the 2007 O.A. Johnson Outstanding Employee Award. This is a lifetime achievement award given in recognition of his contributions to Bay Regional Medical Center as well as the greater healthcare profession. Bay City, MI, October 24, 2007.

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### **Gregg Potter, Ph.D., R.Ph.**

#### Appointments:

Three-year term on the National Board of Examiners in Optometry.

#### Awards:

Promoted to Full Professor

Invited to the National Association of Boards of Pharmacy Foreign Pharmacy Graduate Equivalency Examination Item Writing Workshop, Mount Prospect, IL, April 27-29, 2007.

#### Presentations:

Insulin Delivery Systems presented as part of the fall FSU College of Pharmacy Continuing Education Seminar, Big Rapids, MI, November 2006.

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### **Sarah Raguckas, Pharm.D.**

#### Invited Presentation:

Bridging the Gap Between Primary and Inpatient Care presented at the WMSHP Spring Conference. Calvin College, Grand Rapids, MI. May 20, 2009.

Medications for Managing Diabetic Neuropathy presented to the Type II Diabetes Support Group at Marywood, Grand Rapids, MI, January 17, 2007.

Raguckas Cont.

Linking Literacy and Health...A Formula for Quality Care and Patient Safety Conference presented at the Fetzer Center on Western Michigan Universities Campus for health care professionals (physicians, pharmacist, nurses, etc). Kalamazoo, MI, July 13<sup>th</sup>, 2006.

Poster Presentation:

Medication reconciliation by a clinical pharmacist in a cerebral palsy clinic Poster presentation at the Spring ACCP meeting in partnership with Teresa Klepser, PharmD BCPS, Memphis, TN, Spring 2007.

Presentation:

Getting to the Heart of Medication Counseling at the Matters of the Heart conference, GVSU, February 20, 2009.

Publication:

Sarah E. Raguckas, Pharm.D., Heather L. VandenBussche, Pharm.D., Carrie Jacobs and Michael E. Klepser, Pharm.D., FCCP. Pertussis Resurgence: Diagnosis, Treatment, Prevention, and Beyond Pharmacotherapy, January 2007.

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## **Mary Frances Ross, Pharm.D., BCPS**

Community Service:

With students staffed an Ask Your Pharmacist booth at the Healthier You in Kalamazoo Disabilities Health Fair (in conjunction with the Special Olympics basketball tournaments). Also distributed Poison Prevention information, Saturday, March 24.

Invited Presentation:

Medical Update: Gardasil Vaccine presented at the Kalamazoo Boys' and Girls' club to parents, Kalamazoo, MI, June 18, 2007.

Using Meds to Quit or Not Using Meds to Quit?- That is the Question by Mary Frances Ross, Pharm. D. presented at the Maternal/Infant Health Professionals Training: Pregnancy & Smoking CE conference through Healthy Babies, Healthy Start, Kalamazoo, MI, October 20, 2006.

Writing Goals/Objectives and Putting Together a Syllabus. presented as a round table session at the First Annual Preceptor's Conference, Grand Rapids, MI, June 7, 2006.

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## **Claire Saadeh, Pharm.D.**

Acknowledgement:

Completion of the Harvard Macy Institute Program for Educators in the Health Professions. Recognition as a Harvard Macy Scholar. 2009.

Appointments:

Advisory Committee on Pain & Symptom Management by the MI Board of Pharmacy Controlled Substances Advisory Commission by Jennifer Granholm/Department of Community Health, Fall 2006.

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Saadeh Cont.

CE Presentations:

Management of Nausea & Vomiting in the Palliative Care Setting presented to the Sparrow Health System Palliative Care & Hospice Team, Lansing, MI, April 13, 2010.

Medical Marijuana: Evidence-Based Clinical Applications in Oncology presented at the Michigan Pharmacists Association Annual Convention & Exposition Co-presented with Celeste Clarkson, Bureau of Health Professions (Update on the New MI Medical Marijuana Act), Detroit, MI, February 26, 2010.

Current Trends in Acute & Chronic Pain Management presented to Sparrow Health System Palliative Care & Hospice Team (CME program), Lansing, MI, 2010.

Medical Marijuana: Evidence-Based Clinical Applications in Oncology presented at 42<sup>nd</sup> Annual Great Lakes Nursing Conference. Co-presented with Celeste Clarkson, Bureau of Health Professions (Update on the New MI Medical Marijuana Act), 2010.

Invited Presentation:

Current Trends in Acute & Chronic Pain Management presented at Ferris State University 55th Annual Pharmacy Seminar, Big Rapids, MI, April 2008.

Orientation to 5 West Medical Oncology - General principles in Pain Management presented at Sparrow Hospital, Lansing, MI, March 3, 2008.

Enhancing Your Skills in Pain Management: Interactive Cases and Update in Oncology: The Nibs, Mibs, & Mabs presented at the MPA ACE Meeting, February 29, 2008 and March 1, 2008.

Managing Pain in the Cancer Patient presented at the Current Issues in Oncology Care Conference, Kellogg Hotel & Conference Center, East Lansing, MI, March 16, 2007.

Choosing an Opioid for Chronic Pain: Focus on Methadone presented at the Michigan Pharmacists Association Grand Escape, Mackinac Island, MI, September 23, 2006.

Emerging Cancer Vaccines presented at the Michigan Pharmacists Association Grand Escape, Mackinac Island, MI, September 22, 2006.

General Principles in Pain Management presented at Sparrow Health System, Oncology Nursing Unit, Lansing, MI, August 16, 2006.

Introduction to Oncology, Clinical Pharmacology of Antineoplastic Agents, Supportive Care Issues in the Oncology Patient, Overview of Specific Oncologic Disease States (11 diseases covered) These lectures were presented at the International Oncology Network (ION) Oncology 101 Course in Baltimore, MD August 1, 2, and 3, 2006.

Preparing for Your Precepting Experience presented at Ferris State University Preceptors Conference, Big Rapids, MI, June 7, 2006.

New Drug Update: Oncology presented at the Michigan Pharmacists Association Annual Conference and Exposition meeting, Dearborn, MI, February 17, 2006.

Saadeh Cont.

Poster Presentation:

Saadeh CE. Avoiding the snoozeburger syndrome: using Study Mate as a tool to engage learners presented at Lilly Conference: College & University Teaching & Learning, Traverse City, MI, September 2009.

Hagerman JK, Klepser ME, Mersfelder TL, **Saadeh CE**, Morse JA. Development of interactive, multimedia virtual cases for utilization in the pharmacy curriculum presented Lilly Conference: College & University Teaching & Learning, Traverse City, MI, September 2009.

An Accelerated Learning Approach to the Design & Delivery of the Pharmacy Curriculum presented at the Harvard Macy Institute: Program for Educators in the Health Professions, Cambridge, MA, May 18, 2009.

Hagerman JK, Klepser ME, Mersfelder TL, Saadeh CE, Morse JA. Development of interactive, multimedia virtual cases for utilization in the pharmacy curriculum presented Ferris State University Spring Learning Institute, Big Rapids, MI, April 1, 2009.

Development of an Interdisciplinary Palliative Care Elective presented at the AACP 2007 Annual Meeting & Seminars. 2007.

Schalk H, Saadeh C, Scott R, Hennessey C. Incidence of Opioid Polypharmacy in an Inpatient Setting presented at the Sparrow Health System Performance Improvement Storyboard Day, Lansing, MI, March 14, 2007.

Sparrow Health System Performance Improvement Storyboard Day. a) Optimizing Pain Management Therapy & Enhancing Patient Safety: Reducing Meperidine Utilization. b) Improved Medication Safety for Adult Chemotherapy Admissions: Revised Adult Chemotherapy Admission Order Form. c) Implementation of a Methotrexate Pharmacokinetic Dosing Service, Lansing, MI, March 16, 2006.

Presentations:

Current Trends in Acute & Chronic Pain Management presented at Kent County Pharmacists Association CE Program, July 24, 2009.

Antineoplastics are a Snoozeburger.. Using Study Mate as a Tool to Engage Learners presented at the Ferris State University Spring Learning Institute, Big Rapids, MI, March 31, 2009.

Pain Management: Rush to Judgment vs. Compassion presented at the Michigan Pharmacists Association Annual Convention and Exposition, February 28, 2009.

Current Trends in Acute & Chronic Pain Management presented at the Michigan Pharmacists Association Annual Convention and Exposition, February 27, 2009.

Updates on the Nibs and the Mabs presented at Sparrow Health System Oncology Grand Rounds, Lansing, MI, November 14, 2008.

Publications:

Feinauer A, Saadeh C. Is your patient allergic to an opioid? Sparrow Health System Pharmacy Capsule Newsletter Pharmacy Capsule 2010;2(XXXIX):1-4.



Saadeh Cont.

Saadeh C. Lung cancer. In: Richardson M, Chant C, Cheng JWM, Chessman KH, Hume AL, Hutchison LC, et al., eds. Pharmacotherapy Self-Assessment Program, 6th ed. Book 10: Oncology. Lenexa, KS: American College of Clinical Pharmacy, 2009:57-72.

Saadeh C, Srkalovic G. Mycobacterium avium complex infection after alemtuzumab therapy for chronic lymphocytic leukemia. Pharmacotherapy 2008;28(2):281-4.

Conlan K, Saadeh C. For your health: Fibromyalgia. Michigan Pharmacist 2008; January/February:37-8.

Saadeh C, Lee HS. Panitumumab: A fully human monoclonal antibody with activity in metastatic colorectal cancer Ann Pharmacother 2007;41:xxxx;

Masters L, Saadeh C. Cancer screening and early detection Michigan Pharmacist 2007; March/April:43-44.

Vroman JM, Stiegler SA, Saadeh C. New drug update: Oncology. Michigan Pharmacist 2006; March/April:26-32.2.

Saadeh C, Srkalovic G. Acute hypersensitivity reaction to ferric gluconate in a pre-medicated patient. Ann Pharmacother 2005;39:2124-7.

Saadeh C. Treatment options for metastatic breast cancer. Pharmacy Times 2005;71(11):56-8.

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## **Kali Schulz, PharmD, BCPS**

### Acknowledgement:

Became BCPS certified, December 2008.

### Invited Presentations:

[http://www.pharmacypracticenews.com/index.asp?section\\_id=50&show=dept&article\\_id=12354](http://www.pharmacypracticenews.com/index.asp?section_id=50&show=dept&article_id=12354), 2009.

### Other:

Attended the Great Lakes Young Pharmacists Leadership Conference at the Maumee Bay Resort and Conference Center, Oregon, OH, October 2 - 4, 2009.

### Poster Presentation:

Utilizing Fourth Year Pharmacy Students in a Volunteer Clinic Setting presented at AACP, July 2009.

A characterization of polypharmacy in an inpatient bipolar population presented at the ACCP annual meeting, Louisville, KY in October 2008.

### Publication:

Koski R, Coveyou J, Morissette M. Case Report of SIADH Associated with Escitalopram Use. Journal of Pharmacy Practice 2009;22(6): 594-599.

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## **Curtis Smith, Pharm.D., BCPS**

### Award:

Capital Area Pharmacists Association in recognition of valuable contributions and outstanding leadership to the organization, March 19, 2009.

### Invited Presentations:

Antibiotic Stewardship presented at the Critical Care Conference presented Sparrow Hospital, Lansing, MI, May 13, 2009.

Transplantation Pharmacotherapy presented at the Pharmacist's Seminar, Sparrow Hospital, Lansing, MI, April 28 & 29, 2009.

Infectious Diseases, HIV/Infectious Diseases, Pharmacokinetics: A Refresher presented for 2009 Updates in Therapeutics: The Pharmacotherapy Exam Preparatory Course at the American College of Clinical Pharmacy, Orlando, FL. April 25, 2009.

Treatment of Community Associated MRSA Infections Medical Affairs Community Impact Series presented at Sparrow Health Systems, Lansing, MI, April 26, 2007.

Infectious Diseases: HIV / Infectious Diseases\_Pharmacokinetics: A Refresher 2007 Updates in Therapeutics presented at the Pharmacotherapy Exam Preparatory Course American College of Clinical Pharmacy, Memphis, TN, April 21-24, 2007.

Controversies in Treating Ventilator Associated Pneumonia presented at the Critical Care Conference, Sparrow Hospital, Lansing, MI, May 24, 2006.

Vaccinations: Update for Adults presented at the Fifth Annual Great Lakes Pharmacists Infectious Diseases Conference, Grand Rapids, MI, April 25 and April 27, 2006.

Vaccines: Update for Adults presented to Sparrow Hospital Department of Pharmacy Services, April 25 and 27, 2006.

Infectious Diseases, HIV / Infectious Diseases, Pharmacokinetics: A Refresher. 2006 Updates in Therapeutics presented at the Pharmacotherapy Exam Preparatory Course at the American College of Clinical Pharmacy Spring Meeting, Monterey, CA, April 10, 2006.

Pneumonia presented at Pharmacists Seminar, Ingham Regional Medical Center Lansing, MI, March 14, 2006.

Question and Answer Session Regarding Medications used in Depression and Bipolar Disorder presented to the Depression and Bipolar Support Group, Big Rapids, MI, December 16, 2005.

### Other:

Antibiotic Stewardship, MSU IM Medical Grand Rounds, Sparrow Hospital, Lansing, MI, September 1, 2009.

Smith Cont.

Poster Presentations:

El Mortada M, Stein GE, Smith C, Dybas L, Prince RA, Wang W, Havlichek D. Anidulafungin fungicidal activity in serum from patients does not correspond to its susceptible breakpoint against Candida species presented at the 47th Annual Meeting of the Infectious Diseases Society of America (IDSA), Philadelphia, PA, October 31, 2009.

Stein GE, Smith C, Kepros J, Ji A, Nicolau D, Dybas L, Saunders JP. Tigecycline skin penetration and activity against Methicillin-resistant strains of Staphylococcus aureus (MRSA) presented at 49th Annual Interscience Conference on Antimicrobial Agents and Chemotherapy, San Francisco, CA, September 13, 2009.

El Mortada M, Stein G, Dybas L, Smith C, Havlichek D. Serum and anidulafungin activity against Candida species from adult patients presented at the Michigan ID Society Annual Membership and Scientific Meeting, Detroit, MI, March 14, 2009.

Presentations:

Vancomycin for MRSA Pneumonia – It's Not Dead Yet presented at the 9th Annual Great Lakes Pharmacists Infectious Diseases Conference, Grand Rapids, MI, March 20, 2010.

Drug Interactions presented for pharmacy technicians at the MSHP Annual Meeting, Novi, MI, November 6, 2009.

Overview of Vaccines 2009 presented at the Capital Area Pharmacists Association CE program, Lansing, MI, March 19, 2009.

Overview of Vaccines 2009 presented at the Great Lakes Pharmacy Infectious Disease Conference, Grand Rapids, MI, March 14, 2009.

Treatment of Community Associated MRSA Infections presented at the Sparrow Critical Care Conference, Lansing, MI, October 3, 2007.

Drug Dosing in Obese ICU Patients presented at the Sparrow Critical Care Conference, August 8, 2007 and at the Sparrow Pharmacists Seminar, August 21 and 22, 2007.

Publication:

Stein GE, El Mortada M, Smith C, Dybas L, Prince RA, Havlichek D. Fungicidal activity of anidulafungin in serum from patients does not correlate to its susceptible breakpoint against Candida spp. J Antimicrob Chemother 2010;65:374-6(letter).

Straley CM, Cecil EJ, Herriman MP. Gatifloxacin interference with opiate urine drug screen. Pharmacotherapy 2006 Mar;26(3):435-9.

Service:

Member of the ACCP Student Competition Oversight Panel, 2009

## **Craig Straley, Pharm.D., B.S., BCPP**

### Invited Presentations:

Psychopharmacology presented to VAMC psychology interns at the Psychology Intern Seminar, Battle Creek VA Medical Center, Battle Creek, MI, June 2, 2009.

Channel 3 news interview on the consequences of passage of Proposal 1, Medical Marijuana, with Dr. Michael Liepman (local Kalamazoo TV news broadcast), November 5, 2008.

Pharmacotherapy for psychology interns presented at the Battle Creek VA Medical Center, Battle Creek, MI, October 28, 2008.

Antipsychotics presented to KVCC and WMU Nursing students and videotaped for use in orientation of new BC VA employees, Kalamazoo, MI, February 7, 2008.

Metabolic syndrome with Antipsychotics presented to the Western Michigan Psychiatric Nurses Council, January 22, 2008.

Collaborated with Drs. Liepman and Tareen from KCMS Psychiatry on presentation for CMH at the Mother's Mind Matters Conference, Kalamazoo Community Mental Health Conference, January 22, 2008.

Abilify IM presented at a Noon Conference to the KCMS Psychiatry group, Kalamazoo, MI, January, 24, 2007.

Depression in Children and adolescents presented to the MSHP, Lansing, MI, November 3, 2006.

Psychotropic medications presented at the Psychology Intern Seminar at the Veterans Administration Medical Center, October 17, 2006.

Schizophrenia Invited Therapeutics lecture at Wayne State University/COP, Detroit, MI, October 2, 2006.

Bipolar Disorder Invited Therapeutics lecture at Wayne State University/COP, Detroit, MI, October 2, 2006.

### Presentation:

Cleaning Your Karma: The How, What and Why of Pharmacist Volunteering presented at the MPA meeting, Detroit, MI, February 27, 2010.

What's Up With Stat? presented to Bay Med's medical residents and medical students as part of their didactic lecture series. 2010.

### Service:

Performed an in-service on Antipsychotics for KVCC and WMU nursing students and faculty, Battle Creek VA Hospital, Battle Creek, MI, February 2010.

## **Paul Thill, Pharm.D., BCPS**

### Appointment:

Began participating in the Tri-County Asthma Coalition – a group of health professionals, business entities and the public interested in improving the quality of asthma care in the Bay, Midland, and Saginaw counties, 2006.

### Invited Presentations:

Polypharmacy in the Emergency Department presented at the Emergency Medicine Grand Rounds - Synergy Medical Education, March 20, 2008.

The HPV Vaccine...Warts and All presented at the Great Lakes ID Conference, March 24, 2007.

Asthma Management at School presented at the Pinconning Elementary School, February 20 and the Pinconning Middle and High School, March 23, 2007.

Stroke Prevention presented at the Annual UMW Health Fair, Midland, MI, May 9, 2006.

The Safety and Efficacy of Nutritional Supplements for BPH, Menopause, Obesity and High Cholesterol. presented at the Saginaw Valley State University Wellness Program, April 20, 2006.

Pediatric Pearls presented at the 53rd Annual Pharmacy Seminar at Ferris State University, Big Rapids, MI, April 11, 2006.

### Poster Presentation:

Acute kidney injury secondary to tobramycin and vancomycin-laden bone cement presented at the ACCP annual meeting, Louisville, KY, October 2008.

### Presentation:

Geriatric Psychopharmacology presented to Synergy Family Medicine residents at Grand Rounds, October 8, 2009.

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## **Dean Van Loo, PharmD**

### Award:

Awarded the Michigan Society of Health-System Pharmacists (MSHP) President's Award at the MSHP Annual Meeting, Novi, MI, November 6, 2009.

### Publication:

VandenBussche Heather L, Van Loo Dean A. A clinical review of echinocandins in pediatric patients. Annals of Pharmacotherapy, January 2010.

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## **Heather VandenBussche, Pharm.D.**

### Activities:

Workshop moderator at the 16th Pediatric Pharmacy Conference and Annual Meeting. Workshop was entitled To Study or Not to Study: How to Develop Your Research Protocol, Portsmouth, VA, September 2007.

Research poster judge at the 16th Pediatric Pharmacy Conference and Annual Meeting, Portsmouth, VA, September 2007.

### Appointment:

Appointed to the Pediatric Pharmacy Advocacy Group, Board of Directors. September 2009-September 2012.

Elected as co-chair of the Pediatric Pharmacy Advocacy Group research committee, to serve a two-year term. 2006.

Appointed to serve on the Journal Advisory Board for the Journal of Pediatric Pharmacology and Therapeutics (a publication of the Pediatric Pharmacy Advocacy Group). 2006.

### Invited Presentations:

Pediatric Non-Prescription Medications presented at the 56th Annual Pharmacy Seminar, Ferris State University, Big Rapids, MI, April 14, 2009.

Vaccines Do Not Cause Autism presented at the 8th Annual Great Lakes Infectious Disease Conference, Grand Rapids, MI, March 14, 2009.

Contemporary issues in ADHD presented at The Grand Escape, Michigan Pharmacists Association, Mackinac Island, MI, August 24, 2008.

Meningitis: A Focus on Pediatrics presented at The Grand Escape, Michigan Pharmacists Association, Mackinac Island, MI, August 23, 2008.

Pediatric Community-Acquired Pneumonia. presented at the 7th Annual Great Lakes Infectious Diseases Conference, Grand Rapids, MI, March 15, 2008.

Psychiatric Medications in School Aged Children: The Good and The Bad presented to the Allegan County Speech Pathologist group at the Development Center of the Allegan County Intermediate School District, September 22, 2006.

Update on Cystic Fibrosis. presented at the 53rd Annual Pharmacy Seminar at Ferris State University on Tuesday, April 11, 2006.

Update on Pertussis: Focus on Adults. presented at the 5th Annual Great Lakes Pharmacy Infectious Diseases Conference in Grand Rapids on Saturday, March 25, 2006.

### Poster Presentation:

Evaluation of Ipratropium Use for Acute Asthma Exacerbations in an Inpatient Pediatric Population presented at the 18th Annual Pediatric Pharmacy Conference and Annual Meeting, Pediatric Pharmacy Advocacy Group. Cleveland, OH, September 26, 2009.

VandenBussche Cont.

Experience with continuous infusion vancomycin in the pediatric population Kristen Smit (presenter), Heather VandenBussche, Jennifer Pawelek. presented at the Michigan State University/Kalamazoo Center for Medical Studies Research Day, Kalamazoo, MI, April 16, 2008.

Evaluation of an Empiric Once Daily Tobramycin Dosing Regimen for Pulmonary Exacerbations in Children and Adults with Cystic Fibrosis. Poster co-authors were John Marks, M.D., and Douglas Homnick, M.D. The poster was presented at the 21st Annual North American Cystic Fibrosis Conference in Anaheim, CA on October 4-5, 2007.

Publication:

VandenBussche Heather L, Van Loo Dean A. A clinical review of echinocandins in pediatric patients. *Annals of Pharmacotherapy*, January 2010.

Upper respiratory infections. *Pharmacotherapy Principles & Practice*. New York: McGraw-Hill; 2007. (Chapter in 1st edition of visually enhanced, student-designed *Pharmacotherapy* textbook) Chisholm-Burns MA, Wells BG, Schwinghammer TL, Malone PM, Kolesar JM, Rotschafer JC, DiPiro JT, editors.

Service:

Served as a faculty advisor (with Allison Bernknopf) for Operation Diabetes blood glucose/blood pressure screening event held at Meijer Pharmacy, Portage, MI, December 4.

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## **Gregory Wellman, Ph.D., R.Ph.**

Poster presentation:

Interactive teaching in the large classroom: Techniques for use and impact of and audience response system presented at the 7th Annual Lilly North Conference on College Teaching, Traverse City, MI, October, 2007.

Stop Fighting with Your Students over the Remote: Developing Engaging and Interactive Multimedia for Students presented at the Lilly North Conference, Traverse City, MI, September 2006.

The use of choice based conjoint to measure consumer preference presented in conjunction with Carla Vidcan at the APhA Annual Meeting, San Francisco, CA, March 2006.

Recognition:

Recognized along with Dr. Bernknopf for exemplary on-line course in mixed delivery format; received on-line instructor certification, Spring 2007.

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## Addendum D

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### ACPE FACULTY ADDENDUM FERRIS STATE UNIVERSITY – COLLEGE OF PHARMACY

#### KEY COLLEGE/SCHOOL OFFICERS

Dean	Ian Mathison, Professor, Pharmaceutical Sciences (Medicinal Chemistry); B.Pharm., University of London (1960); Ph.D., University of London (1963); D.Sc., University of London (1976); R.Ph. UK.
Associate Dean	Stephen Durst, Professor, Pharmacy Practice; B.S.(Pharmacy), Ferris State University (1981); Pharm.D., The University of Michigan (1986); R.Ph. MI.
Assistant Dean	Gregory Wellman, Professor, Pharmaceutical Sciences (Pharmacy Administration); B.S.(Pharmacy), Ferris State University (1981); M.S., (Pharmacy Admin), The Ohio State University (1984); Ph.D., The Ohio State University (2000); R.Ph. MI.

#### FACULTY

##### Pharmacy Practice

##### Chair

Bouthillier, Michael, Associate Professor, Pharmacy Practice, B.S.(Pharmacy); Ferris State University (1981); Pharm.D., University of Utah (1989); R.Ph., MI.

##### Full Time

Bailey, Teresa, Professor, Pharmacy Practice; B.S. (Pharmacy), Ferris State University (1992); Pharm.D., Wayne State University (1995); R.Ph. MI.

Baran, Rosalie, Practicum Director; B.S. (Pharmacy), Ferris State University (1971); M.A. (Business Management), Central Michigan University (1986); R.Ph. MI.

Bernknopf, Allison, Associate Professor, Pharmacy Practice; Pharm.D., University of Maryland (2002); R.Ph. MI, NJ.

Coveyou, Jill, Assistant Professor, Pharmacy Practice; Pharm.D., Ferris State University (2005); R.Ph. MI, GA.

DeHoag, Cambria, Experiential Coordinator, Professor, Pharmacy Practice; Pharm.D., Ferris State University (1997); R.Ph. MI.



Elder, Jodie, Assistant Professor, Pharmacy Practice; Pharm.D., Ferris State University (2001); R.Ph. MI.

Hagerman, Jennifer, Associate Professor, Pharmacy Practice; Pharm.D., Ferris State University (2003); R.Ph. MI.

Hansen, Kierstan, Assistant Professor, Pharmacy Practice; B.A. (Physiology), The University of Minnesota (2004); Pharm.D., The University of Iowa (2008); R.Ph. MI, IN.

Jameson, John, Professor, Pharmacy Practice; B.S. (Pharmacy), Ferris State University (1979); Pharm.D., The University of Minnesota (1982); R.Ph. MI.

Klepser, Michael, Professor, Pharmacy Practice; Pharm.D., The University of Michigan (1992); R.Ph. MI.

Koski, Renee, Professor, Pharmacy Practice; B.S. (Pharmacy), Ferris State University (1995); Pharm.D., Ferris State University (1998); R.Ph. MI.

Lee, Stephen, Associate Professor, Pharmacy Practice; B.S. (Biochemistry), Eastern Michigan University (1996); M.S. (Physiology and Pharmacology), University of Florida (1999); Pharm.D., University of Florida (2004); R.Ph. MI, NV.

Mersfelder, Tracey, Associate Professor, Pharmacy Practice; B.S. (Pharmacy), University of Cincinnati (1994); Pharm.D., University of Cincinnati (1997); R.Ph. MI.

Raguckas, Sarah, Associate Professor, Pharmacy Practice; B.S. (Biomedical Sciences), Western Michigan University (2001); Pharm.D., Ferris State University (2004); R.Ph. MI.

Ross, Mary Frances, Professor, Pharmacy Practice; B.S. (Pharmacy), Wayne State University (1983); Pharm.D., University of Texas HSCSA (1986); R.Ph. MI, IL.

Rowley, Kristina, Assistant Professor, Pharmacy Practice; Pharm.D., Ferris State University (2007); R.Ph. MI.

Saadeh, Claire, Associate Professor, Pharmacy Practice; B.S. (Pharmacy), Brighton Polytechnic (1989); Pharm.D., Wayne State University (1994); R.Ph. MI, FL.

Schulz, Kali, Assistant Professor, Pharmacy Practice; Pharm.D., Ferris State University (2007); R.Ph. MI.

Smith, Curtis, Professor, Pharmacy Practice; B.S. (Pharmacy) Ferris State University (1987); Pharm.D. Medical University of South Carolina (1989); R.Ph. MI, SC.

Straley, Craig, Professor, Pharmacy Practice; B.S. (Pharmacy), Ferris State University (1977); Pharm.D., State University of New York (1988); R.Ph. MI.

Thill, Paul, Associate Professor, Pharmacy Practice; Pharm.D., The University of Michigan (1992); R.Ph. MI, IN.

Van Loo, Dean, Associate Professor, Pharmacy Practice; Pharm.D., The University of Michigan (1994); R.Ph. MI.

Vandenbussche, Heather, Professor, Pharmacy Practice; Pharm.D., The University of Michigan (1995); R.Ph. MI.

#### Part Time

Campbell, Sandra, Clinical Assistant Professor, Pharmacy Practice; Pharm.D., The University of Michigan (2000); R.Ph. MI; (0.9 FTE).

de Voest, Margaret, Associate Professor, Pharmacy Practice; B.S.(Pharmacy), Ferris State University (1991); Pharm.D., Ferris State University (1995); R.Ph. MI, VA; (0.6 FTE).

Meny, Lisa, Assistant Professor, Pharmacy Practice; Pharm.D., Ferris State University (2005); R.Ph. MI; (0.8 FTE).

Morse, Jacqueline, Assistant Professor, Pharmacy Practice; Pharm.D., Ferris State University (2006); R.Ph. MI; (0.5 FTE).

Nienhuis, Marc, Associate Professor, Pharmacy Practice; B.S. (Pharmacy), Ferris State University (1975); Pharm.D., The University of Michigan (1977); R.Ph. MI; (0.5 FTE).

### **Pharmaceutical Sciences**

#### Chair

Dakkuri, Adnan, Professor, Pharmaceutical Sciences (Pharmaceutics); B.S. (Pharmacy), American University of Beirut (1962); M.S., University of Illinois (1966); Ph.D., University of Illinois (1968).

#### Full Time

Bates, Jeffrey, Assistant Professor, Pharmaceutical Sciences (Pharmacy); B.S. (Pharmacy), Ferris State University (1991); Pharm.D., Ferris State University (2007); R.Ph. MI.

Bennett, David, Assistant Professor, Pharmaceutical Sciences (Pharmacy Administration); B.S. (Pharmacy), University of Utah (1981); M.S. (Administration), Central Michigan University (1994); Ph.D., University of Arizona (2002); R.Ph. MI, TX, OK, WI.

Boncher, Tracey, Associate Professor, Pharmaceutical Sciences (Medicinal Chemistry); B.S. (Chemistry and Biology), The University of Michigan (1998); Ph.D. Wayne State University (2003).

Hancock, Kim, Professor, Pharmaceutical Sciences (Pharmaceutics); B.S. (Pharmacy), Ferris State University (1988); Ph.D., Purdue University (1995); R.Ph. MI.

Hult, Richard, Professor, Pharmaceutical Sciences (Pharmacology); B.S. (Pharmacy), Ferris State University (1968); M.S. (Pharmacology/Toxicology), Oregon State University (1974); Ph.D., Oregon State University (1976); R.Ph. MI.

Krueger, Robert, Professor, Pharmaceutical Sciences (Pharmacognosy); B.S. (Pharmacy), University of Connecticut (1971); Ph.D., University of Iowa (1975).

Lovsted, Elsie, Professor, Pharmaceutical Sciences (Medicinal Chemistry); B.S. (Pharmacy), University of Minnesota (1967); Ph.D., University of Minnesota (1974); R.Ph. MN.

McMullen, Kenneth, Instructor, Pharmaceutical Sciences (Pharmacy); B.S. (Pharmacy), Ferris State University (1979); R.Ph. MI.

Miskimins-Mills, Beth, Assistant Professor, Pharmaceutical Sciences (Biochemistry); B.S. (Microbiology/Biochemistry), Iowa State University (2004); Ph.D., University of Iowa (2010).

Ngoh, Lucy, Associate Professor, Pharmaceutical Sciences (Pharmacy Administration); B.S., (Pharmacy) University of Washington (1985); M.H.A., Tulane University (1988); Ph.D., University of Texas (1992); R.Ph., MI, TX.

Potter, Gregg, Professor, Pharmaceutical Sciences (Pharmacology); B.S. (Pharmacy), Ferris State University (1986); Ph.D., Michigan State University (1997); R.Ph. MI.

### **Student Services**

Lyons, Margaret, Director of Off-Campus Students Services; B.S. (Business Administration), Central Michigan University (1982); M.A. (Counseling Psychology), Western Michigan University (1995).

Seiferlein, Mandy, Director of External Clinical Operations; B.B.A., Western Michigan University (2002); M.P.A., Western Michigan University (2005).



**Accreditation Council for Pharmacy Education  
Standards 2007 Self-Study Template  
for Colleges and Schools**

*(Version 2.1, Dec 2008)*

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## Abbreviations

AACP	American Association of Colleges of Pharmacy
ABO	Ability Based Outcomes
AC	Assessment Committee
ACPE	Accreditation Council for Pharmaceutical Education
ADSAA	Assistant Dean of Student Affairs and Assessment
APhA	American Pharmacists Association
APPE	Advanced Pharmacy Practice Experiences
CAS	College of Arts and Sciences
CET	Candidate Evaluation Team
CRTF	Curricular Revision Task Force
DECO	Director of External Clinical Operations
EAB	Experiential Advisory Board
EC	Experiential Coordinator
FCTL	Faculty Center for Teaching and Learning
FFA	Ferris Faculty Association
FLITE	Ferris Library for Information, Technology and Education
FSU	Ferris State University
GRMEP	Grand Rapids Medical Education Partners
GRMERC	Grand Rapids Medical Education and Research Center
HLC	Higher Learning Commission
ILL	Inter-library Loan
IPPE	Introductory Pharmacy Practice Experiences
ISM	Independent Study Modules
KCMS	Kalamazoo Center for Medical Studies
MPA	Michigan Pharmacists Association
MPJE	Multi-state Pharmacy Jurisprudence Examination
MSU-CHM	Michigan State University Collage of Human Medicine
NAPLEX	North American Pharmacy Licensure Examination
NCPA	National Community Pharmacists Association
SA/A	Strongly Agree/Agree
SAI	Student Assessment of Instruction
SDL	Student Directed Learning
SPARC	Strategic Planning and Resources Council
UCC	University Curriculum Committee
VPAA	Vice President for Academic Affairs

## **I. Summary of the Self-Study Process**

Summarize the processes used to plan and organize the Self-Study and to review and adopt the Self-Study Report. This summary should be approximately two pages long (single sided, 12-point font, line spacing no less than 1.5).

In preparation for the 2010-2011 accreditation process, members of the College's Executive Committee convened in March, 2009, to outline the organizational structure for the accreditation process, develop plans for the kick-off meeting and identify chairs for each section of Standards 2007. Additional individuals that could provide input to the process were identified and advised of the upcoming process. The University's Administration was notified that the College would be preparing a Self-Study report in preparation for an on-site visit in 2010-2011. Membership in the Self-Study Steering Committee was determined by the standing Accreditation Committee to include: all members of the Accreditation Committee, chairs of each of the accreditation standards sections, two Alumni Board representatives, a P2 student, Co-Chairs consisting of the Associate Dean and Department Chairs (upon appointment), and the Pharmaceutical Sciences Department Secretary for clerical support. Steering Committee and Section membership is outlined below:

### Co-Chairs:

Adnan Dakkuri, B.S., Ph.D, Department Chair, Pharmaceutical Sciences  
Michael Bouthillier, B.S., Pharm.D., Department Chair, Pharmacy Practice  
Stephen Durst, B.S., Pharm.D., Associate Dean

### Accreditation Committee:

Richard Hult, B.S., Ph.D., Pharmaceutical Sciences  
Robert Krueger, B.S., Ph.D., Pharmaceutical Sciences  
Claire Saadeh, B.S., Pharm.D., Pharmacy Practice  
Curtis Smith, B.S., Pharm.D., Pharmacy Practice

### Section Chairs and Members:

Mission, Planning and Evaluation – Adnan Dakkuri, B.S, Ph.D.  
-M. Klepser, R. Krueger, S. Lee, D. Van Loo  
Organization and Administration – Cambria DeHoag, Pharm.D.  
-R. Baran, J. Jameson, T. Mersfelder, G. Potter  
Curriculum – Elsie Lovsted, B.S, Ph.D.  
-J. Bakus, J. Coveyou, C. Feucht, R. Hult, M. Nienhuis, C. Smith, C. Straley,  
P. Thill  
Students – Greg Wellman, B.S, M.S., Ph.D.  
-R. Koski, J. Hagerman, M, Lyons, L. Ngoh, K. Rowley, M. Seiferlein,  
H. VandenBussche  
Faculty and Staff – Claire Saadeh, B.S., Pharm.D.  
-T. Bailey, T. Boncher, M. de Voest, K. Hanson, S. Raguckas, M. Ross

Facilities – Kim Hancock, B.S, Ph.D.

-J. Bates, A. Bernknopf, M. Bouthillier, M. McMullen, J. Morse, K. Schulz

Student Representative:

Ryan Greenley, P3

Alumni Board Representatives:

Rick W. Dettloff, B.S., Pharm.D.

Andrew Young, B.S.

Clerical Support:

Melissa Saunders

The Self-Study “Kick-Off” was held on June 16, 2009; Dr. George Spratto, Ph.D., ACPE Board of Directors, provided an overview of Standards 2007 and outlined the Self-Study process and expectations to the faculty. During the session, section chairs convened their committees and made initial assignments, organized the section, identified sources of information and metrics, and provided a brief report to the entire faculty outlining their plans for the section. Section chairs were then responsible for guiding the development of the response to each standard during the remainder of the Summer and Fall semester. Monthly meetings of the Steering Committee were held through the Fall, with frequency increasing to bi-weekly in the Winter. A rough draft was assembled in early May, 2010, and each faculty member was assigned to review two standards prior to a College-wide meeting on May 17<sup>th</sup> in which each standard was discussed with the faculty review presented. A subsequent draft was distributed to all faculty for a second full-faculty meeting on June 21. Section Chairs reviewed each standard in the section, discussing the checklist and the final evaluation. Following this review, an electronic ballot was mailed to all faculty members, requesting their evaluation of each standard. Voting results were incorporated into the final Self-Study document. Final versions of each section were prepared and forwarded to editors for review in June and July.

Information sessions were held with each class, P1, P2 and P3, to acquaint them with the accreditation process and the upcoming site visit. A list of talking points were prepared for the College’s adjunct faculty and presented at their Annual Conference in June.

Throughout the process, development of the Self-Study relied on the input of faculty members and selected stakeholders, incorporated data obtained from various assessment metrics including the AACCP/ACPE Surveys and internal assessment data and focused on the checklists included in each Standard. Most importantly, the process reflects a collective effort of the faculty, staff and administration as well as key college stakeholders.

## II. Overall Organization of the Self-Study Report

Please evaluate the program's self-study report on the following parameters.

	Commendable	Meets Expectations	Needs Improvement
Participation in the Self-Study Process	The self-study report was written and reviewed with broad-based input from students, faculty, preceptors, staff, administrators and a range of other stakeholders, such as patients, practitioners, and employers.  Commend <input type="checkbox"/>	The self-study report was written and reviewed with broad-based input from students, faculty, preceptors, staff and administrators.  Meets <input checked="" type="checkbox"/>	The self-study report was written by a small number who did not seek broad input from students, faculty, preceptors, staff, and administrators.  Needs Improvement <input type="checkbox"/>
Knowledge of the Self-Study Report	Students, faculty, preceptors, and staff are conversant in the major themes of the report and how the program intends to address any deficiencies.  Commend <input type="checkbox"/>	Students, faculty, preceptors, and staff are aware of the report and its contents.  Meets <input checked="" type="checkbox"/>	Students, faculty, preceptors, and staff have little or no knowledge of the content of the self-study report or its impact on the program.  Needs Improvement <input type="checkbox"/>
Completeness and Transparency of the Self-Study Report	All narratives and supporting documentation are thorough, clear and concise. The content appears thoughtful and honest. Interviews match the self-study findings.  Commend <input type="checkbox"/>	All narratives and supporting documentation are present. The content is organized and logical.  Meets <input checked="" type="checkbox"/>	Information is missing or written in a dismissive, uninformative or disorganized manner. Portions of the content appear biased or deceptive.  Needs Improvement <input type="checkbox"/>
Relevance of Supporting Documentation	Supporting documentation of activities is informative and used judiciously.  Commend <input checked="" type="checkbox"/>	Supporting documentation is present when needed.  Meets <input type="checkbox"/>	Additional documentation is missing, irrelevant, redundant, or uninformative.  Needs Improvement <input type="checkbox"/>
Evidence of Continuous-Quality Improvement	The program presents thoughtful, viable plans to not only address areas of deficiency, but also to further advance the quality of the program beyond the requirements of the Standards.  Commend <input type="checkbox"/>	The program proactively presents plans to address areas where the program is in need of improvement.  Meets <input checked="" type="checkbox"/>	No plans are presented or plans do not appear adequate or viable given the issues and the context of the program.  Needs Improvement <input type="checkbox"/>
Organization of the Self-Study Report	All sections of the report are complete and organized or hyper-linked to facilitate finding information, e.g., pages are numbered and sections have labeled or tabbed dividers.  Commend <input type="checkbox"/>	The reviewer is able to locate a response for each standard and the supporting documentation with minimal difficulty.  Meets <input checked="" type="checkbox"/>	Information appears to be missing or is difficult to find. Sections are not well labeled.  Needs Improvement <input type="checkbox"/>



### **III. Summary of the Evaluation of All Standards**

Please complete this summary (●) after evaluating the individual standards (30) in this Program Evaluation Form.

Standards	Meets	Partially Meets	Does Not Meet
<b>MISSION, PLANNING, AND EVALUATION</b>			
1. College or school Mission and Goals	●(25)	○(1)	○(0)
2. Strategic Plan	○(8)	●(17)	○(1)
3. Evaluation of Achievement of Mission and Goals	●(21)	○(5)	○(0)
<b>ORGANIZATION AND ADMINISTRATION</b>			
4. Institutional Accreditation	●(25)	○(1)	○(0)
5. College or school and University Relationship	●(25)	○(1)	○(0)
6. College or school and other Administrative Relationships	●(24)	○(1)	○(1)
7. College or school Organization and Governance	○(8)	●(18)	○(0)
8. Qualifications and Responsibilities of the Dean	●(18)	○(4)	○(4)
<b>CURRICULUM</b>			
9. The Goal of the Curriculum	●(26)	○(0)	○(0)
10. Curricular Development, Delivery, and Improvement	●(24)	○(1)	○(0)
11. Teaching and Learning Methods	●(23)	○(3)	○(0)
12. Professional Competencies and Outcome Expectations	●(25)	○(1)	○(0)
13. Curricular Core—Knowledge, Skills, Attitudes, and Values	●(25)	○(1)	○(0)
14. Curricular Core—Pharmacy Practice Experiences	●(25)	○(1)	○(0)
15. Assessment and Evaluation of Student Learning and Curricular Effectiveness	○(7)	●(18)	○(1)
<b>STUDENTS</b>			
16. Organization of Student Services	●(24)	○(1)	○(0)
17. Admission Criteria, Policies, and Procedures	●(24)	○(1)	○(0)
18. Transfer of Credits and Waiver of Requisites for Admission with Advanced Standing	●(25)	○(0)	○(0)
19. Progression of Students	●(21)	○(4)	○(0)
20. Student Complaints Policy	●(23)	○(1)	○(1)
21. Program Information	●(25)	○(0)	○(0)
22. Student Representation and Perspectives	●(23)	○(2)	○(0)
23. Professional Behavior and Harmonious Relationships	●(20)	○(3)	○(2)
<b>FACULTY AND STAFF</b>			
24. Faculty and Staff—Quantitative Factors	○(5)	●(20)	○(1)
25. Faculty and Staff—Qualitative Factors	●(21)	○(5)	○(0)
26. Faculty and Staff Continuing Professional Development and Performance Review	○(7)	●(19)	○(0)
<b>FACILITIES AND RESOURCES</b>			
27. Physical Facilities	●(23)	○(3)	○(0)
28. Practice Facilities	●(15)	x(11)	○(0)
29. Library and Educational Resources	●(26)	○(0)	○(0)
30. Financial Resources	○(7)	●(17)	○(2)

(Numbers represent final voting results)

## **IV. Progress and Changes**

- 1) Rate the college or school on its progress or changes in the six areas of the Standards since the last accreditation visit by indicating “Satisfactory (S)” or “Needs Improvement (N.I)” on the checklist below:

	<b>S</b>	<b>N.I.</b>
The college or school has progressed in each area since ACPE’s last comprehensive visit.	●	○
The college or school has addressed any concerns previously raised by ACPE.	●	○
The college or school has adhered to the reporting guidelines, limiting the total summary to no more than 6 pages of double-spaced, 12-point text.	●	○

Over the past several years, the College of Pharmacy has engaged in an aggressive plan to address recommendations outlined in the 2004 ETR and to move the College and curriculum forward to meet stakeholders’ existing expectations and to anticipate the future needs of the evolving health care system.

**Facilities and Resources:** During the same period, the State of Michigan has faced a significant fiscal challenge directly affecting the University and to some extent, the College. Until 2009, there had been little effect on College appropriations, with the College budget remaining constant or modestly increased annually. To meet a reduction in the College budget in 2009, the Assistant Dean/Department Head, Pharmaceutical Sciences, position was eliminated. This decision was carefully considered in light of the vacancy that had existed for over a year. Appointment of two Department Chairs during the 2009-2010 academic year and now formalized in 2010 has mitigated the loss of this administrative position. Further, additional responsibilities have been added to two clerical positions in the College to assist with admissions and accreditation issues. This has provided added resources to assist the Assistant Dean of Student Affairs and Assessment. Also in 2009, a salary equity adjustment for the College’s faculty, to correct what had become a significant gap between national data and the College salary scale, was implemented. Funding for the adjustment was provided jointly by the Vice President for Academic Affairs and through a reallocation of funding from the College’s supplemental faculty budget.

Earlier this year, each College in the University was requested to develop a budget reflecting an overall reduction of 2% in FY 2011. As a result of previous reductions in the supplemental faculty budget and funding for open positions that had fallen below the identified salary, the College was able to maintain its existing total budget, with a reduction in Supplies and Expenses reallocated to the supplemental faculty budget. This internal reallocation will ensure adequate funding for supplemental faculty support of didactic and experiential instructional needs. At present, the FY 2011 budget is adequate for existing operations.

The relocation of much of Michigan State University’s College of Human Medicine (MSU-CHM) to Grand Rapids and expansion of the Van Andel Research Institute has created a center for healthcare education in Grand Rapids. The University, aware of the growth of medical education and the important role of inter-professional

education in the pharmacy curriculum, responded to an invitation in 2008 to begin discussions with MSU-CHM, investigating the potential of co-location in the proposed facility. Although those discussions were ultimately unsuccessful, the University has identified an alternative site, with many advantages over the MSU-CHM site and is pursuing purchase or lease of the facility, allowing for the merger of the two off-campus instructional sites to a single location. Plans will be finalized in late summer, 2010, with the expected completion date of 2011. This commitment of support is an indication of the University's recognition of the College of Pharmacy and its need for appropriate off-campus facilities.

Student comfort and quality of instructional facilities on-campus have been addressed, resulting in a complete renovation of the College's instructional auditorium, development of a clinical skills laboratory and plans for construction of a sterile parenteral laboratory. With the renovation of the pharmacy auditorium, faculty from distant sites will be able to participate in on-campus courses through distance learning. Individual student space and comfort in the auditorium is increased as the seating capacity has been reduced substantially while total floor space remains the same. A cognitive skills lab was developed from an existing pharmacology lab and funding for a simulation mannequin has been requested for this year. The proposed simulation in the P2 lab would prepare students for further simulation in P3; the College currently participates with Grand Valley State University's College for Health Sciences in the delivery of a P3 elective course that includes inter-professional training in a simulation laboratory with several mannequins.

**Curriculum:** The revision of the College's Doctor of Pharmacy curriculum is the most comprehensive and evidence-based activity the College has undertaken in the recent past. Forming a Curricular Revision Task Force (CRTF) in 2007, the Dean requested that a thorough revision of the existing curriculum be considered, while maintaining the existing "2 + 4" curricular model and approximate credit allocations. In addition, the curriculum was to comply with the newly adopted Standards 2007 and address any remaining issues from the 2004 accreditation process. The resulting revision process focused on three principal areas: admission requirements (pre-pharmacy requirements), curricular integration and experiential education.

Admission requirements were updated to establish a foundation for the professional curriculum that would prepare students for P1 coursework. Most significantly, the two-semester Anatomy and Physiology sequence was moved into pre-pharmacy to allow for addition of a two-semester Pathophysiology course in the professional curriculum. A formal pathophysiology course was not included in the existing curriculum and students' understanding of disease processes was seen as a limiting factor in achieving the desired outcomes in the P3 Pharmacotherapeutics course sequence. The admission requirement of statistics/biostatistics was deleted, feeling that the material could best be addressed in the professional curriculum with greater consistency. These changes

were posted on the College Web site and all two- and four-year programs in the State were notified of the revised requirements to allow students to make the necessary changes in their preparation.

Within the professional curriculum, significant changes were implemented. Course material related to infectious diseases was integrated into the P2 “Infectious Diseases” courses, team-taught with faculty from the Biology Department, Pharmaceutical Sciences and Pharmacy Practice. The two-course sequence will provide students with a more comprehensive approach to pathogens, pathology, anti-microbial agents and infectious disease therapy in an integrated manner. Medicinal chemistry and pharmacology were integrated into the single course, “Drug Action” which will be team taught. Through this integration, duplication that was seen between the two separate courses will be eliminated and it is anticipated that students will gain a greater understanding of the relationship of the two disciplines and will be better prepared for capstone courses in the third and fourth professional years.

Experiential components were evaluated for content, outcomes and placement within the existing curriculum with experiential components moved earlier in the curriculum. The Introductory Pharmacy Practice Experiences (IPPEs) are composed of a variety of activities; the community-based IPPE is now in the summer, immediately following P1 and the health-system IPPE follows P2. Longitudinal IPPEs are introduced in P2 and continue in P3 with a team of students assigned to monitor an ambulatory patient in the community. The IPPEs following P1 and P2 are each supported by a revised course manual and the longitudinal IPPEs have outcomes clearly identified for the students. The Advanced Pharmacy Practice Experiences (APPEs) include a required health-system clerkship; this increases the P4 year from eight to nine months in length. To support this enhanced experiential coursework, the College has expanded its adjunct faculty and practice site pool while continuing to recruit for open faculty positions within the Pharmacy Practice Department. Contractual arrangements with several health systems in the State have provided for a consistent base of clinicians, complementing the Pharmacy Practice Department faculty, to precept the required clerkships in both the 2000 and 2009 curricula. These contractual arrangements are reviewed annually specifying the number of students assigned and scheduling very similar to that of faculty members. Elective clerkships have been assigned to other practice sites that are arranged based on student demand and preceptor availability. Through this combination of faculty, contractual sites and conventional adjunct sites, students have been placed in APPEs without delays in graduation and with consideration of their preferences.

**Students:** The appointment of the Practicum Director, the Director of External Clinical Operations (DECO) and the formation of the Experiential Team (ET) has increased the level of support and coordination for experiential operations in the College. Notably, the DECO has developed a “Clinical Passport” system that identifies all required elements for student placement in affiliated sites, and tracks completion of each requirement.

This has substantially improved ease of student placements and provided a level of assurance to affiliated sites that students meet all requirements upon arrival. An additional responsibility of the DECO position has been codification of all processes within the experiential program and in student volunteer activities to ensure compliance with university policies. The Practicum Director is currently a temporary position and will be made permanent prior to the start of the 2010-2011 academic year. This position has led the development of the IPPE program in the new curriculum, while coordinating activities within the existing program. In addition, the ET includes two community practice faculty members and an adjunct faculty member. In contrast to 2004, there is an increased level of support for the curriculum's experiential programming directly resulting from the added faculty resources now comprising the ET.

Operation of the off-campus instructional site model has been refined through updating of technology and increased efforts to improve communications throughout the College system. The delivery of course work through distance learning has become much more reliable with an upgrade in 2008 and a redoubling of technical support, including training of students to support the operation. The Director of Off-campus Student Affairs has coordinated implementation of several communication tools and student committees to improve communications. This includes a Student Advisory Board (SAB) that meets regularly at each site to discuss student concerns and to develop solutions and an advisor's council composed of faculty advisors of student professional organizations that meets regularly to discuss projects in the Big Rapids, Grand Rapids and Kalamazoo communities. Pharmacy 4-1-1 is a "course" in Blackboard that is specifically used for dissemination of information. Refinements in organization of the course are underway to increase the utility to students. There has been a notable improvement in communications with students through this combination of efforts.

Programmatic and curricular assessment has advanced exponentially since 2004 with the most significant advances in the last year with the appointment of the Assistant Dean for Student Affairs and Assessment (ADSAA). The University's decision to use the TracDat<sup>®</sup> platform for all university assessment activities has provided an organized system for assessing the achievement of curriculum ability-based outcomes (ABOs) that serve as the foundation for the 2009 Curriculum. Results of the AACP/ACPE Assessment Surveys have been entered into TracDat<sup>®</sup>, providing an organized approach to programmatic assessment. A student assessment portfolio was implemented with the Fall, 2009 entering class, which includes reflective journals, student self-assessment of ABOs and course content evaluations. Student self-assessment of selected ABOs was also instituted for the P2 and P3 students. All data has been entered into TracDat<sup>®</sup>. Evaluations from the Clinical Seminar course (PHPR680) are also used as an assessment metric, and entered into the TracDat<sup>®</sup> system. Faculty have recently been provided full access to TracDat<sup>®</sup>, providing a significant level of transparency in the assessment process. The College's Assessment Plan outlines additional measures that are currently evaluated and that will be evaluated as assessment is

expanded to encompass a broader range of outcomes. This represents a significant advance in assessment activities from the 2004 Self-Study.

The College has completely revised its admission process to comply with the Standards 2007 requirement for in-person interviews. This has had a notable effect on applicant numbers, with a decrease seen in the past two years. It is felt that implementation of the new curriculum, without an early graduation option, may also be responsible for the smaller applicant pool. Despite this, grade point averages and PCAT scores for the most recently admitted classes have shown only a small decline as more top-ranking candidates are accepting admission to the College. To address applicant pool concerns, the College will be further modifying its admission process for the 2011 year, utilizing the PharmCAS admission process for the first time.

External funding for students has more than doubled in the past six years with over \$160,000 awarded in the Spring, 2009, Honors Convocation. Private and corporate scholarship support for academically outstanding students in each year of the curriculum has more than doubled since 2004. The substantial growth in student support is a direct reflection of the Dean's ability to work with various stakeholders. Efforts continue to ensure that the most qualified candidates are admitted to the College and that financial awards recognize academically outstanding students.

Faculty, staff and administrators have worked diligently over the past six years to address the issues raised in the 2004 site visit, to comply with Standards 2007 and to effectively engage issues unique to the College. This has resulted in a new curriculum implemented in 2009, a revised admission process in 2009, expansion of an initial assessment plan, renovation of several key facilities within the College with anticipation of a new off-campus instructional site in 2011. Student achievement has been consistently above national and state averages as indicated by NAPLEX and MJPE scores of graduates. In an environment of declining State support and increasing program options for students, College metrics have shown improvement. Faculty members have demonstrated dedication and innovation through participation in an impressive plan to introduce active learning in the classroom.

In summary, the 2010 Self-Study and accreditation process documents the successful efforts of college faculty, staff and administrators to provide, amidst a wide-range of challenges, academically qualified students with an excellent education and career opportunity.

2) If "Needs Improvement (N.I.): is noted above, please explain:

## **V. Evaluation of Individual Standards**

### **a. Mission, Planning, and Evaluation**

#### **For Standards 1-3:**

Use a check  to indicate the information evaluated to assess the standards in this section:

- The current mission statement, goals, objectives, and core values for the college or school of pharmacy. (1)<sup>1</sup>
  - The Institutional Mission Statement and Goals. (1)
  - Descriptions of how the college or school's mission is aligned with the mission of the institution. (1)
  - Description of how the mission and associated goals in education, research/scholarship, service and practice are developed and approved by all stakeholders. (e.g., Committee meeting minutes, Faculty meeting minutes). (1)
  - Description of how the mission is being assessed and followed. (1)
  - Description of how and where the mission statement is published. (1)
  
  - The college or school's strategic plan for achieving its mission and goals. Plan should include: (2)
    - timelines for action scheduled at appropriate intervals (e. g., quarterly, semi-annually, etc.); (2)
    - person(s) identified as accountable for management and/or action for the stated events; (2)
    - identification of resources (not limited to time and finances) for the relevant items; (2) and
    - yearly review of the entire plan with continuation or proper re-direction dependent on new information and results. (2)
  - The Institutional strategic plan to achieve its mission and goals. **(To be made available on-site.)** (2)
  - Description of how the strategic plan was developed (including evidence of stakeholder input). (2)
  - Evidence of support and cooperation of University administration for the college or school plan (e.g., letters of support from the university administration, administrative actions taken in support of the plan, etc.). (2)
  - Evidence documenting that the strategic plan is driving decision-making in the college or school. (2)
  
  - Copy of the evaluation plan. (3)
  - Examples of instruments used in assessment and evaluation. (3)
  - Evidence of assessment in all components of the program's mission. (3)
  - Evidence that assessments resulted in improvements. (3)
  - Examples of analyses/evaluation findings/reports generated as a result of assessment and evaluation activities. (3)
  - Description of the members of the Assessment Committee (or equivalent) and charges in the last academic year. (3)
  
  - Interpretation of the data from the AACP Surveys of Students, Faculty, Preceptors and Alumni.
  - Raw data from the AACP Surveys of Students, Faculty, Preceptors and Alumni.
  - Other documentation or data that provides evidence of meeting the standard.
- 

<sup>1</sup> Standards are noted in parentheses.

**Standard No. 1: College or School Mission and Goals:** The college or school of pharmacy (*hereinafter "college or school"*) must have a published statement of its mission, its goals in the areas of education, research and other scholarly activities, service, and pharmacy practice, and its values. The statement must be compatible with the mission of the university in which the college or school operates.<sup>2</sup> These goals must include fundamental commitments of the college or school to the preparation of students who possess the competencies necessary for the provision of pharmacist-delivered patient care, including medication therapy management services, the advancement of the practice of pharmacy and its contributions to society, the pursuit of research and other scholarly activities, and the assessment and evaluation of desired outcomes.

1) Use the checklist below to rate the program on the requirements of the standard and accompanying guidelines:

	S	N.I.
The college or school has a published statement of its mission; its goals in the areas of education, research and other scholarly activities, service, and pharmacy practice; and its values.	●	○
The mission statement is compatible with the mission of the university in which the college or school operates.	●	○
The college or school's goals include fundamental commitments of the program to the preparation of students who possess the competencies necessary for the provision of pharmacist-delivered patient care, including medication therapy management services, the advancement of the practice of pharmacy and its contributions to society, the pursuit of research and other scholarly activities, and the assessment and evaluation of desired outcomes.	●	○
For new college or school initiatives and alternate pathways to degree completion, the college or school ensures that: <ul style="list-style-type: none"> <li>the initiatives are consistent with the university's and the college or school's missions and goals</li> <li>the same commitment is demonstrated to all students, irrespective of program pathway or geographic location</li> <li>resources are allocated in an equitable manner</li> </ul> <p style="text-align: right;">N/A (no alternate pathways, etc.) <input checked="" type="checkbox"/></p>	○	○
The college or school has addressed the guidelines for this standard.	●	○

<sup>2</sup> The term "university" includes independent colleges and schools.



2) **Describe** how the program is meeting the Standard and Guidelines. (On average, text responses for this item, combined with text responses addressing items 3 and 4 below should not exceed 4 pages (4 pages/standard X 30 standards = 120 total text pages to address items 2,3, and 4 for each standard)

Throughout the University, a significant effort to update mission statements at all programmatic levels was undertaken within the recent past recognizing the significant changes that had occurred since the adoption of the last *University Mission Statement*. The revision process was comprehensive and inclusive with the input of a wide range of University stakeholders. A broad range of faculty, administrators and staff were invited to identify the strengths of the institution as well as current and future challenges. Following this initial assessment, the Strategic Planning and Resources Council (SPARC) was formed of various University stakeholders including presidents of the Academic Senate and labor unions, members of the President's Council and representatives from each college. An intentional and iterative process was then initiated with generation of ideas through meetings with stakeholder groups including students. Input was received and reviewed again by the campus community; this process was repeated with broad consensus emerging within stakeholder groups and final revisions were approved by the SPARC. These documents were then reviewed and supported by the Academic Senate. A subgroup of the SPARC then identified major goals of the University Strategic Plan and the initiatives to support these goals. The process continued with six core values identified: *Collaboration, Diversity, Ethical Community, Excellence, Learning and Opportunity*.

In 2007 the College formed a standing committee, the Accreditation Committee (AC), which was responsible for initiation of all accreditation-related reports and, additionally, for developing recommendations regarding the existing *College Mission Statement* which was adopted in 2004. This effort coincided with the campus-wide efforts to develop a new *Mission, Vision and Values Statement* as outlined above. As iterations of the University document became available, various revisions to the *College Mission Statement* were proposed. With the completion of the *University Mission, Vision and Values* document in 2008, the AC endeavored to complete the revision process in the 2008-2009 Academic year. The committee reviewed a number of mission statements of different formats from outside the University, primarily from other schools/colleges of pharmacy. From that review, a draft document was developed and presented to the faculty in December 2008. Significant input was gathered resulting in the development of a final draft that was circulated to the entire faculty for an "e-vote" in March 2009 culminating in the approval of the *College Mission Statement* (see Appendix 1.1). Throughout the process, committee discussions leading to the development of each draft carefully considered the College's strengths and those areas that were felt to be critical to the College's future. As the *College Mission Statement* was developed with careful consideration of the *University Mission, Vision and Values Statement*, there is considerable alignment between the two documents and several common themes. Key elements of the *College Mission Statement* are compared with elements from the *University Mission, Vision and Values Statement* and presented in the table below.

## Mission Statement Alignment

<i>College of Pharmacy</i>	<i>University</i>
The College of Pharmacy fosters the development of its students, faculty and pharmacists into practitioners who positively influence the health outcomes of the peoples of Michigan, the Great Lakes region, the nation and the global community.	Ferris State University prepares students for successful careers, responsible citizenship, and lifelong learning. Through its many partnerships and its career-oriented, broad-based education, Ferris serves our rapidly changing global economy and society.
“...highest quality pharmacy professional education to student and practitioners.”	“Excellence: Committed to innovation and creativity, Ferris strives to produce the highest quality outcomes in all its endeavors.”
“...patient-centered care by pharmacists that are committed to the safe and appropriate use of medication.”	“...The recognized leader in integrative education, where theory meets practice throughout the curriculum...”
“Developing and maintaining relationships with alumni, professional associations and the health care industry...”	“Collaboration: Ferris contributes to the advancement of society by building partnerships with students, alumni, business and industry, government bodies...”
“...development of each faculty member to meet the pedagogical, scholarly and service demands of a dynamic curriculum and profession”	“A stimulating, student-centered academic environment that fosters life-long engagement, leadership, citizenship, and continuing intellectual development.”
“...creation of a professional community that embodies the principles of ethics, fairness, honesty, civility and respect for peoples’ diversity of ideas, beliefs and cultures.”	“Diversity: By providing a campus which is supportive, safe, and welcoming, Ferris embraces a diversity of ideas, beliefs, and cultures. “Ethical Community: Ferris recognizes the inherent dignity of each member of the University community and treats everyone with respect.”

Emphasis on teaching at the College is obvious in the *Mission Statement* with reference to “... the development of its students, faculty and pharmacists who positively influence the health outcomes of the peoples....” Support for this overarching statement is contained in several statements including: “provision of the highest quality pharmacy professional education”, “delivery of patient-centered care by pharmacists committed to the safe and appropriate use of medications”, and “the development of each faculty member to meet the pedagogical, scholarly and service demands of a dynamic curriculum and profession.” Although not directly stated, expansion of the College’s assessment program is implicit in the provision of the “highest quality pharmacy professional education....”

The *College Mission Statement* is supported by the *Pharmaceutical Sciences and Pharmacy Practice Departments’ Mission Statements* (see Appendix 1.2 and 1.3). These documents also highlight the College’s teaching emphasis and complement one another. Key concepts from the two documents include:

- expertise in the delivery of the basic scientific concepts that form the foundation of the profession
- optimization of medication therapy and the promotion of wellness

- acquisition of critical thinking skills
- innovational pharmacy practice education, patient-centered care, service and scholarly activity
- use of validated pedagogical techniques
- creation of progressive practice models
- advancement of faculty through strong mentorship and educational endeavors
- engagement of students in an interdisciplinary approach to patient-centered pharmacotherapy and public health

With the development of mission, vision and value statements within the last 2-3 years for the University, the College and the two academic departments, a consistent foundation that demonstrates commitment to quality education and practice has been established.

3) **Comments:** Describe a) areas of the program that are noteworthy<sup>3</sup>; b) the program's assessment of its issues and its plans for addressing them with relevant timeframes; or c) findings that highlight areas of concern along with actions or recommendations to address them:

The University-wide significant efforts to develop mission, vision and values statements that are contemporary and complementary have led to a sequence of documents that provide guidance and support for the College's efforts in planning. Efforts to include all stakeholders in the University process are especially noteworthy. Support for the *College Mission Statement* as reflected in the statements from the two departments provides faculty with a distilled reference point that is consistent with their pedagogical, research and service activities.

The recent adoption of the TracDat system, a University-wide platform for assessment activities, has facilitated the assessment of the College's mission and supporting goals through objective measurement. Utilizing specific metrics, TracDat will allow for the regular evaluation of the extent of compliance with the College's mission and potentially the supporting goals.

4) **Quality Improvements:** Write any additional comments to further advance the quality of the program:

Further, stakeholders beyond the faculty and staff were not consulted as the *College Mission Statement* was developed. This might have left a limited number of faculty members with the sense that the process was not transparent and rushed to completion. In future iterations of the *Mission Statement*, additional groups of the College's stakeholders, specifically, students, alumni, and advisory boards, will be involved.

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<sup>3</sup> Examples of Noteworthy Areas: a) The college or school synchronizes the reviews and updates of its mission with changes to the institution's mission. b) Faculty can clearly articulate the mission and their role in fulfilling it.

Broader metrics for assessment of the *College Mission Statement* will be developed and loaded in the TracDat system as the College and entire University become more familiar with TracDat. Such an approach utilizing a University-wide standard will provide a broader assessment of all components of operations at the College.

5) **Final Evaluation:** Using your best professional judgment, evaluate how well the program meets the standard by putting a check in the appropriate box :

Meets the Standard	Partially Meets the Standard	Does Not Meet the Standard
<ul style="list-style-type: none"> <li>• The college has a dynamic, long-term mission with broad coverage that was created through group processes that include faculty endorsement.</li> <li>• The college or school's mission is aligned with the university's mission.</li> <li>• The college or school's goals include fundamental commitments to preparing students who possess the competencies necessary to provide pharmacist-delivered patient care.</li> </ul>	<ul style="list-style-type: none"> <li>• The college has a short-term mission with limited coverage that was created with little input or faculty endorsement.</li> <li>• The college or school's mission is not aligned with the university's mission.</li> <li>• The college or school has a plan and is in the process of addressing all issues related to not meeting the requirements of this standard.</li> </ul>	<ul style="list-style-type: none"> <li>• The college has no mission or no goals.</li> <li>• The college or school's goals do not include commitments to preparing students who possess the competencies necessary to provide pharmacist-delivered patient care.</li> </ul>
<input checked="" type="checkbox"/> <b>Meets the Standard</b>	<input type="checkbox"/> <b>Partially Meets the Standard</b>	<input type="checkbox"/> <b>Does Not Meet the Standard</b>

**Standard No. 2: Strategic Plan:** The college or school must develop, implement, and regularly revise a strategic plan to facilitate the advancement of its mission and goals. The strategic plan must be developed through an inclusive process that solicits input and review from faculty, students, staff, administrators, alumni, and other stakeholders as needed, have the support of the university administration, and be disseminated in summary form to key stakeholders.

1) Use the checklist below to rate the program on the requirements of the standard and accompanying guidelines:

	Ok	N.I.
The program is in the process of or has developed, implemented, and regularly revises a strategic plan to advance its mission and goals.	<input checked="" type="radio"/>	<input type="radio"/>
The strategic planning process is inclusive, soliciting input and review from faculty, students, staff, administrators, alumni, and other stakeholders as needed, has the support of the university administration, and is disseminated in summary form to key stakeholders.	<input type="radio"/>	<input checked="" type="radio"/>
Substantive changes are addressed through its strategic planning process, taking into consideration all resources (including financial, human, and physical) required to implement the change and the impact of the change on the existing program.	<input checked="" type="radio"/>	<input type="radio"/>
The college or school monitors, evaluates and documents progress toward achievement of strategic goals, objectives, and the overall efficacy of the strategic plan.	<input type="radio"/>	<input checked="" type="radio"/>
The program notifies ACPE in advance of the implementation of any substantive change, allowing sufficient time for evaluation of compliance with standards or the need for additional monitoring. N/A (no changes) <input type="checkbox"/>	<input checked="" type="radio"/>	<input type="radio"/>
The college or school has addressed the guidelines for this standard.	<input checked="" type="radio"/>	<input type="radio"/>

2) **Describe** how the program is meeting the Standard and Guidelines. (On average, text responses for this item, combined with text responses addressing items 3 and 4 below should not exceed 4 pages (4 pages/standard X 30 standards = 120 total text pages to address items 2,3, and 4 for each standard)

Strategic planning is the responsibility of the Strategic Planning Committee, charged annually with the task of shaping the strategic plan of the College. Development of the strategic plan and review of the previous plan is guided by the University's annual planning process. Over the past several years, the format of the strategic plan has been intentionally modified to reflect the more comprehensive University planning now in place. A review of recent strategic plans of the College (see Appendix 2.1) reflects the evolution of formatting with the 2009 plan representing the most comprehensive plan in recent years. Because of significant fiscal exigencies within the State, this year's strategic planning has been reduced in scale due to campus-wide fiscal restructuring. The fiscal impact on the College was initiated by budgetary reductions within the Academic Affairs Division. The College subsequently developed a budget following frequent meetings of the College's Administrative Council and faculty. These meetings provided valuable details to faculty members regarding general fund allocations, faculty position funding and supplemental faculty support. In late April, 2010, the Vice President for Academic Affairs (VPAA) office provided guidelines for an abbreviated planning process focused on existing elements of the *University Mission, Vision and Value Statement* felt to be of critical importance in the future. Colleges were to identify areas of success and opportunity in the areas identified.

The College's Strategic Planning Committee is composed of an assistant or associate dean and three faculty members from each department. As outlined above, strategic planning within the College is fully supported by the University administration as the planning structure is developed by the VPPA's office. An additional layer of approval was introduced in 2009, with the presentation of the strategic plans of all colleges to the Deans' Council in two planning sessions: one focused on content of the plan, the second on fiscal considerations. This approach ensures that College planning meets the expectations of the University administration in its content and scope and University administration is fully aware of Colleges' annual plans. Because of the limited process utilized in 2010, this review was not conducted.

Input from faculty in the strategic planning process relies on close collaboration of the committee members with their respective constituents. In the past, faculty input was somewhat limited as the strategic planning process often followed a very short timeline. This was improved in the 2009 iteration of the plan with the faculty members on the committee contributing significantly to the development and organization of the plan. A process to gather faculty input, similar to that used in the 2009 planning, will be utilized, and improved upon in future activities.

As stated earlier, the *2009 Strategic Plan* followed a more detailed and specific format, aligned with the University's strategic plan and planning process. It included a statement of specific goals, as well as action items

and timelines for accomplishing the goals. The strategic plan from the College followed this format, addressing three broad areas within the College: personnel, physical facility, and College culture. The plan was then made available through the College's password-protected internal website to all faculty members and administrators.

The 2009 process represented a substantive change in the College's strategic planning activities. Implementation of the new curriculum led to the inclusion of several key elements in the 2009 Strategic Plan. Most notably, the proposed renovation of the sterile compounding laboratory was a direct result of the expansion of the sterile products/IV admixture component of the second professional year curriculum. Similarly, the 2009 plan called for creation of an office of intellectual development to assist entry-level faculty members with the development of meaningful research endeavors early in their careers. Both of these items were the direct result of faculty input during the 2009 planning process.

Monitoring of the annual plan is guided by the process outlined by the VPAA's office. This process generally includes a review of goals from the previous year and assessment of their attainment in a meeting with the President, VPAA/Provost, Associate Provosts, and interested faculty members. This year's session entitled "Share your Successes," was conducted in late March. This meeting provided for a review of the past year's achievements without critical review of the College's achievements.

Apart from curricular revision, a process of continual engagement, there have been no substantive changes within the program since the last accreditation visit, at which time the enrollment expansion was underway; the Pharm.D./MBA track was being developed; and the off-campus instructional site model (Grand Rapids and Kalamazoo campuses) had been implemented. Plans for additional significant changes in the future will follow the Substantive Change Guidelines available at the ACPE website as well as new guidance from the University regional accreditor, the Higher Learning Commission.

**3) Comments:** Describe a) areas of the program that are noteworthy<sup>4</sup>; b) the program's assessment of its issues and its plans for addressing them with relevant timeframes; or c) findings that highlight areas of concern along with actions or recommendations to address them:

In contrast to the 2010 strategic planning process, the 2009 process resulted in a complete plan that focused on all aspects of College operations. Contributing to the breadth of the 2009 plan was the common membership across several key committees within the College. Several members of the strategic planning committee are heavily involved with and serve as liaisons to the Curriculum Committee and the Assessment Committee thus providing an opportunity for cross pollination as well as increased coordination between curriculum, assessment, and planning committees. Developments directly attributed to the 2009 Strategic Plan include the filling of six open faculty

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<sup>4</sup> Examples of Noteworthy Areas: The strategic plan drives the activities of the program. ( e.g. the executive committee uses the plan at their meetings.)

positions, appointment of the Assistant Dean of Student Affairs and Assessment, appointment of two department chairs, and adjustment of faculty salaries to competitive levels. The plan also called for the establishment of procedures for identifying faculty workload related to course coordination and course remediation; efforts in both areas are currently ongoing.

4) **Quality Improvements:** Write any additional comments to further advance the quality of the program:

With the development of a comprehensive plan in 2009, it is clear that a more formal communication process between the Strategic Planning Committee and various College committees, Assessment and the Curriculum Committees in particular, would be beneficial in view of the latter committees' roles in identifying future direction and needs of the Pharm. D. program. In addition, the Strategic Planning Committee would benefit from meeting regularly to ensure adequate input from all stakeholders. Similarly, the committee must function in a manner that facilitates incorporation of input from stakeholders such as adjunct preceptors, alumni and students. Any modification in the College's strategic planning is anticipated to comply with that of the University as the process will likely continue to evolve as a result of the State's changing fiscal predicament.

5) **Final Evaluation:** Using your best professional judgment, evaluate how well the program meets the standard by putting a check in the appropriate box :

Meets the Standard	Partially Meets the Standard	Does Not Meet the Standard
<ul style="list-style-type: none"> <li>• The strategic plan was developed and endorsed by the faculty as a whole and is reviewed at least annually.</li> <li>• The strategic plan lists all responsible participants and timelines.</li> <li>• Strategic planning includes preceptors and alumni.</li> <li>• The strategic plan identifies planned substantive changes (e.g. enrollment growth, expanded programs, satellite campuses).</li> <li>• The faculty are keenly aware of the strategic plan in areas that are assigned to them.</li> <li>• Goals in the strategic plan are being accomplished.</li> </ul>	<ul style="list-style-type: none"> <li>• The strategic plan was developed with little input or faculty endorsement and has no timeframe for review and revision.</li> <li>• Strategic planning excludes key constituents such as preceptors and alumni.</li> <li>• The college or school has a plan and is in the process of addressing all issues related to not meeting the requirements of this standard.</li> </ul>	<ul style="list-style-type: none"> <li>• The college or school is not following its strategic plan or has none.</li> <li>• The strategic plan does not address substantive changes (e.g., enrollment growth, expanded programs, satellite campuses) that have taken place or are planned.</li> <li>• The faculty are unaware of the strategic plan in areas that are assigned to them.</li> </ul>
<input type="checkbox"/> Meets the Standard	<input checked="" type="checkbox"/> Partially Meets the Standard	<input type="checkbox"/> Does Not Meet the Standard



**Standard No. 3: Evaluation of Achievement of Mission and Goals:** The college or school must establish and implement an evaluation plan that assesses achievement of the mission and goals. The evaluation must measure the extent to which the desired outcomes of the professional degree program (including assessments of student learning and evaluation of the effectiveness of the curriculum) are being achieved. Likewise, the extent to which the desired outcomes of research and other scholarly activities, service, and pharmacy practice programs are being achieved must be measured. The program must use the analysis of process and outcome measures for continuous development and improvement of the professional degree program.

1) Use the checklist below to rate the program on the requirements of the standard and accompanying guidelines:

	S	N.I.
The evaluation plan describes a continuous and systematic process of evaluation covering all aspects of the college or school and the accreditation standards. The plan is evidence-based and embraces the principles and methodologies of continuous quality improvement.	●	○
The evaluation plan includes assessments to compare and establish comparability of alternative program pathways to degree completion, including geographically dispersed campuses and distance-learning activities. N/A (no distance activities) <input type="checkbox"/>	●	○
The program assesses achievement of the mission and goals.	●	○
The analysis of process and outcome measures are used for continuous development and improvement of the professional degree program.	●	○
The program measures the extent to which the desired outcomes of the professional degree program (including assessments of student learning and evaluation of the effectiveness of the curriculum) are being achieved.	●	○
The program measures the extent to which the desired outcomes of research and other scholarly activities, service, and pharmacy practice programs are being achieved.	○	●
The college or school has addressed the guidelines for this standard.	●	○

2) **Describe** how the program is meeting the Standard and Guidelines. (On average, text responses for this item, combined with text responses addressing items 3 and 4 below should not exceed 4 pages (4 pages/standard X 30 standards = 120 total text pages to address items 2,3, and 4 for each standard)

Creation of the Assistant Dean of Student Affairs and Assessment (ADSAA), position was facilitated by the resignation of the Assistant Dean for Student Affairs in 2007 and the Assistant Dean/Department Head of Pharmaceutical Sciences in 2008. Responsibilities for assessment were re-assigned to the ADSAA position in an effort to increase support for assessment activities with 0.5 FTE assigned to the position. Reassignment of assessment responsibilities also ensured that assessment activities would not be confused with evaluation activities as there are no faculty reporting to the ADSAA. Formed in 2004 and chaired by the ADSAA, the Assessment Committee (AC) is responsible for assessment of any function of the College supporting the *Mission Statement*. In addition to the ADSAA the AC is composed of three faculty members from each academic department. The AC oversees the assessment of learning and programmatic outcomes and is responsible for all data collection, review of results and subsequent actions relating to assessment in the College. Additionally, the AC is responsible for developing criteria used to determine successful attainment of learning and programmatic outcomes. A discussion of the College's assessment plan is contained in Section 15 of this report.

To facilitate campus-wide assessment activities, the University has purchased a software package designed to manage assessment efforts - TracDat (Nuventive, Pittsburgh, PA). The College began using the system in fall 2009 to track curricular and programmatic outcomes. TracDat has a robust report-generating capacity, allowing for the creation of a variety of evaluative/descriptive reports based on various categories including: outlines, objectives, method of assessment, criteria for success, assessment schedule and related courses in the curriculum. The metrics for assessing criteria (e.g. NAPLEX scores/pass rates, portfolio results, survey data, test scores, capstone course performance, etc.), and the criteria for success (specific thresholds developed by the AC) have been integrated into the TracDat system. Criteria for success were determined by the AC based on the existing analysis of the AACP/ACPE surveys. All outcomes failing to meet the criteria for success are identified in a variance report that is reviewed each semester by the AC, providing a listing of curricular issues to address. Beyond identification of performance in specific outcomes, TracDat allows for longitudinal monitoring of corrective actions and results with transparent access by all College faculty members.

The first phase of TracDat implementation centered on ability-based outcomes (ABOs) identified in the initial design of the 2009 Curriculum. These ABOs consisted of curricular and programmatic-level outcomes (see Appendices 3.1 and 3.2). Tracking of course-level outcomes will be the final phase of implementation and is expected to be fully functional in the 2010-2011 academic year. With that phase of implementation, faculty members will have access to specific TracDat pages that will allow them to enter metrics related to achievement of course-specific learning outcomes.

To complement the curricular ABOs, two additional assessment elements are monitored through TracDat: 1) student portfolio assessment and 2) graduate, faculty, preceptors and alumni survey results.

Students in the 2009 Curriculum are required to post a reflective portfolio entry online each semester. The portfolio pilot consists of the following:

- Student assessment of ability-based outcomes for their respective professional year in response to a survey.
- Reflective journaling to provide feedback on different aspects of professional development. In the first semester, the journal entries relate to entry into the Doctor of Pharmacy program and self-perceptions of a professional.
- Evaluation of the content delivery in the first year of the program and assessment of content duplication, integration, and omission from the approved syllabi.

Using a rubric for evaluation, the ADSAA and AC review all journal entries. These data are then entered into TracDat as a means of monitoring students' professionalization in the curriculum. Reflective journaling has been expanded to include P2 students in spring 2010 semester and will be implemented for all students in the new curriculum during the 2010-2011 academic year.

The second source of additional assessment data is the AACP/ACPE surveys. These surveys are utilized to collect standardized curricular and programmatic assessment data from graduate, faculty, preceptors and alumni. Results are entered into TracDat and analyzed by the AC on an annual basis utilizing the criteria developed by the AC as well as the national data provided by AACP.

Assessment criteria from three distinct outcome areas – curricular ABOs, AACP/ACPE Surveys and reflective journals – have provided the foundation for development of a comprehensive assessment database with both curricular and programmatic components. Data from the assessment of facilities and resources will also be entered into TracDat providing an additional facet to the comprehensive assessment. The continued use of TracDat will provide longitudinal tracking of data allowing for monitoring of assessment-driven changes in the curriculum and program.

Complementing the structured assessment plan and TracDat system, the College routinely requests input from its Alumni Advisory Board which meets three times annually. During the curricular revision process, the Board was apprised of curricular development on a regular basis, with valuable input received and incorporated into the new curriculum. On an as-needed basis, the College convenes its National Advisory Board, providing additional input into college-related matters. At the onset of curricular revision, input was sought from this panel of experts in pharmacy practice, providing underpinnings of some of the curricular changes made.

- 3) **Comments:** Describe a) areas of the program that are noteworthy<sup>5</sup>; b) the program's assessment of its issues and its plans for addressing them with relevant timeframes; or c) findings that highlight areas of concern along with actions or recommendations to address them:

The appointment of the ADSAA represents the College's commitment to assessment. Previously assessment efforts were directed by the Assistant Dean/Department Head for Pharmaceutical Sciences with 0.25 FTE devoted to assessment; the new ADSAA position includes 0.5 FTE devoted to assessment. With appointment of the ADSAA, the College has made significant progress in developing a structured assessment plan. The University's implementation of the TracDat system has facilitated the College's ability to employ multiple assessment measures, both direct and indirect, from a variety of vantage points (student, faculty, alumni) in order to gain a comprehensive analysis of student progress toward meeting learning outcomes. Placing responsibility for assessment with the ADSAA also brings with it synergy that was not previously seen as the new Assistant Dean position has a comprehensive view of the entire curriculum, student progression and achievement of outcomes. In addition, the recent adoption of revised mission, vision and values statements for all divisions provides a contemporary battery of outcomes to assess the program.

- 4) **Quality Improvements:** Write any additional comments to further advance the quality of the program:

Expansion of assessment activities to include student and faculty productivity in scholarship and service will be implemented. Registration of student and faculty service activities through the University's Student Volunteer Services office will be implemented in fall 2010. This will provide a measurement of the level of service (volunteer activity) attributable to the College annually. Preparation of a College Annual Report, listing all faculty and student scholarship and service will serve to quantify scholarly activity and also indicate the quality of such endeavors. Continued modification of the College's assessment plan, in light of developing data sources (i.e. TracDat, reflective journals) will be essential. The University is also exploring the adoption of a portfolio system for documenting both students' and faculty's development. This produce may be useful in documenting scholarly activity.

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<sup>5</sup> Examples of Noteworthy Areas: A) Assessment is an integral part of the culture of the institution. B) Faculty and administrators are widely involved in the assessment process.

5) **Final Evaluation:** Using your best professional judgment, evaluate how well the program meets the standard by putting a check in the appropriate box :

Meets the Standard	Partially Meets the Standard	Does Not Meet the Standard
<ul style="list-style-type: none"> <li>• The college or school has identified outcomes for all its goals.</li> <li>• The evaluation plan outlines a systematic process to measure achievement of the outcomes.</li> <li>• The college or school's assessment activities involve other areas than just curriculum, such as outcomes of faculty research.</li> <li>• Individuals have been assigned specific responsibilities in the evaluation plan.</li> <li>• The evidence of achievement shows that the college or school is educating students to become generalist practitioners as well as meeting the specific mission of the program.</li> </ul>	<ul style="list-style-type: none"> <li>• The college or school's assessment activities are limited to just curriculum.</li> <li>• The evidence of achievement shows that the college or school is not educating students to become generalist practitioners or to meet the specific mission of the program.</li> <li>• The college or school has a plan and is in the process of addressing all issues related to not meeting the requirements of this standard.</li> </ul>	<ul style="list-style-type: none"> <li>• The college or school has not identified outcomes or it has no systematic process to measure achievement of the outcomes.</li> <li>• No one has been assigned the responsibility for evaluating the plan.</li> </ul>
<input checked="" type="checkbox"/> <b>Meets the Standard</b>	<input type="checkbox"/> <b>Partially Meets the Standard</b>	<input type="checkbox"/> <b>Does Not Meet the Standard</b>

## **b. Organization and Administration**

### **For Standards 4-8:**

Use a check  to indicate the information evaluated to assess the standards in this section:

- Document(s) verifying institutional accreditation. (4)
  - Report of any deficiencies from institutional accreditation. (4)
  
  - University and college or school organizational charts. (5, 7)
  
  - Description of number and nature of affiliations external to the college or school. (6)
  - Example of affiliation agreements for the purposes of experiential education and professional services. (6)
  - Evidence of contract for each affiliation. **(To be made available on-site.)** (6)
  - Description of academic research activity outside the college or school. (6)
  - Description of alliances that will produce interprofessional education. (6)
  
  - Written bylaws and policies and procedures of college or school (e.g., copy of Faculty Handbook, **to be made available on site**). (7)
  - Job Descriptions for Administrators. (7)
  - List of committees with their members and designated charges. (7)
  - List of support staff within each department/division. (7)
  
  - Desired qualifications and responsibilities of the Dean (from job description or position announcement). (8)
  - Synopsis of Curriculum Vitae of the Dean. (8)
  - Evaluations of the Dean's performance (e.g., annual review, 5-year review, 360-evaluations). (8)
  
  - Interpretation of the data from the AACP Surveys of Students, Faculty, Preceptors and Alumni.
  - Raw data from the AACP Surveys of Students, Faculty, Preceptors and Alumni.
  - Other documentation or data that provides evidence of meeting the standard.
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**Standard No. 4: Institutional Accreditation:** The institution housing the college or school, or the independent college or school, must have or, in the case of new programs, achieve full accreditation by a regional/institutional accreditation agency recognized by the U.S. Department of Education.

1) Use the checklist below to rate the program on the requirements of the standard and accompanying guidelines:

	S	N.I.
The institution housing the program, or the independent college or school, has full accreditation by a regional/institutional accreditation agency recognized by the U.S. Department of Education or it is in the process of seeking accreditation within the prescribed timeframe	<input checked="" type="radio"/>	<input type="radio"/>
The program reports to ACPE, as soon as possible, any issue identified in regional/institutional accreditation actions that may have a negative impact on the quality of the professional degree program and compliance with ACPE standards.	<input type="radio"/>	<input type="radio"/>
Not Applicable <input checked="" type="checkbox"/>		
The college or school has addressed the guidelines for this standard.	<input checked="" type="radio"/>	<input type="radio"/>

2) **Describe** how the program is meeting the Standard and Guidelines. (On average, text responses for this item, combined with text responses addressing items 3 and 4 below should not exceed 4 pages (4 pages/standard X 30 standards = 120 total text pages to address items 2,3, and 4 for each standard)

Ferris State University is accredited by The Higher Learning Commission (HLC) of the North Central Association of Colleges and Schools. The HLC is recognized by the US Department of Education and the Council on Higher Education Accreditation. The last comprehensive site visit was in March 2001, after which, the University was granted full accreditation. The University is preparing for reaccreditation presently, with the site visit planned for April 2011. During the last accreditation visit, there were a few concerns cited, including inconsistency in administration of general education requirements, differences in general education requirements between FSU and Kendall College of Art and Design, and lack of an institutional replacement cycle for technology infrastructure. These were subsequently addressed by the University and submitted to the HLC. None of the concerns involved the College of Pharmacy. The document citing these concerns and the University's response is available in Appendix 4.1. Currently, no follow up reports are required. The official record of our accreditation status can be found at: [http://www.ncahlc.org/index.php?option=com\\_directory&Itemid=192&Action=ShowBasic&instid=1321](http://www.ncahlc.org/index.php?option=com_directory&Itemid=192&Action=ShowBasic&instid=1321)

- 3) **Comments:** Describe a) areas of the program that are noteworthy; b) the program's assessment of its issues and its plans for addressing them with relevant timeframes; or c) findings that highlight areas of concern along with actions or recommendations to address them:
- 4) **Quality Improvements:** Write any additional comments to further advance the quality of the program:
- 5) **Final Evaluation:** Using your best professional judgment, evaluate how well the program meets the standard by putting a check in the appropriate box :

Meets the Standard	Partially Meets the Standard	Does Not Meet the Standard
<ul style="list-style-type: none"> <li>• Documentation of regional/institutional accreditation is included.</li> <li>• If the regional/institutional accreditation status changes, the Dean can articulate how the changes affect the college or school. (ACPE review procedures.)</li> </ul>	<ul style="list-style-type: none"> <li>• The institution has applied for regional/institutional accreditation and is awaiting the outcome.</li> <li>• The institution has received an adverse action and is in the process of responding to it.</li> </ul>	<ul style="list-style-type: none"> <li>• The institution has no accreditation and has not applied to become accredited.</li> <li>• The institution has lost its accreditation.</li> </ul>
<input checked="" type="checkbox"/> <b>Meets the Standard</b>	<input type="checkbox"/> <b>Partially Meets the Standard</b>	<input type="checkbox"/> <b>Does Not Meet the Standard</b>



**Standard No. 5: College or School and University Relationship:** The college or school must be an autonomous unit within the university structure and must be led by a dean. To maintain and advance the professional degree program, the university president (or other university officials charged with final responsibility for the college or school ) and the dean must collaborate to secure adequate financial, physical (teaching and research), faculty, staff, student, practice site, preceptor, library, technology, and administrative resources to meet all of the ACPE accreditation standards.

1) Use the checklist below to rate the program on the requirements of the standard and accompanying guidelines:

	S	N.I.
The college or school is an autonomous unit within the university structure, led by a dean.	●	○
The university president (or other university officials charged with final responsibility for the college or school) and the dean collaborate to secure adequate financial, physical (teaching and research), faculty, staff, student, practice site, preceptor, library, technology, and administrative resources to meet all of the ACPE accreditation standards.	●	○
The college or school participates in the governance of the university, in accordance with its policies and procedures.	●	○
The college or school has autonomy, within university policies and procedures and state and federal regulations, in all the following areas: <ul style="list-style-type: none"> <li>● programmatic evaluation</li> <li>● definition and delivery of the curriculum</li> <li>● development of bylaws, policies, and procedures</li> <li>● student enrollment, admission and progression policies</li> <li>● faculty and staff recruitment, development, evaluation, and retention</li> </ul>	●	○
The college or school's reporting relationship(s) is depicted in the university's organizational chart.	●	○
The college or school has addressed the guidelines for this standard.	●	○

2) **Describe** how the program is meeting the Standard and Guidelines. *(On average, text responses for this item, combined with text responses addressing items 3 and 4 below should not exceed 4 pages (4 pages/standard X 30 standards = 120 total text pages to address items 2,3, and 4 for each standard)*

An eight member Board of Trustees (Board), appointed by the Governor, with the advice and consent of the Senate, governs the University. The Board has general control, supervision, and management of the University and control and direction of all expenditures from the funds of the University. The Board also has responsibility for appointing the University President, the principal executive officer of the University; the President serves as an ex-officio member of the Board without the right to vote. Dean Ian Mathison maintains a functional relationship with the President and Vice-Presidents of the University. Collaboration occurs regularly on many issues through individual meetings or the Deans' Council meetings. After a succession of three Vice-Presidents of Academic Affairs in three years, Dr. Fritz Erickson assumed the role of Provost and Vice President for Academic Affairs on July 1, 2009. Prior to his appointment, Dr. Daniel Burcham served as the interim Vice-President of Academic Affairs from June 2008 to June 2009; Dr. Thomas Oldfield served as the interim Vice President from May 2007 to May 2008 following the resignation of Dr. Michael Harris. While the College has maintained good communication with each of the interim Vice Presidents, this has resulted in slower progress with respect to key issues within the College, including approval of new positions (administrative, faculty and staff), approval of open positions and the salary equity adjustments made in the summer of 2009. See Appendix 5.1 for the organizational structure of the College.

Over the past several years, collaboration with the Provost's Office and the President's Office has been essential in addressing several issues related to College funding and resource availability. These interactions have occurred with both College administration as well as faculty members. The most striking example of collaboration and open dialog resulted from the campus-wide effort to increase transparency in all communications. A team from the President's office and a facilitator met with the College faculty in November 2008 with a subsequent meeting in January 2009 to discuss issues of concern. From those initial meetings, a task force of faculty members, informally referred to as the "morale committee," then addressed several issues of importance in the College including faculty salary inequities when compared with reported data from AACFP. Through a combined effort, College faculty and administration in collaboration with the Interim Vice President, completed a thorough review of College salaries with adjustments to boost all faculty salaries to between the 25<sup>th</sup> and 50<sup>th</sup> percentiles of the 2008-09 AACFP Profile of Pharmacy Faculty.

The University's support for the College of Pharmacy and the regard the Administration has for the College, its leadership, faculty and students is indicated by the significant efforts to relocate the third professional year to a single location on or near the state of the art "medical mile" in Grand Rapids. This effort has involved all levels of upper administration within the University working directly with the College's Dean and Associate Dean in the

development of an initial needs statement, followed by exhaustive discussions with Michigan State University's College of Human Medicine (MSU-CHM) which ended unsuccessfully approximately one year ago. Despite this disappointment, University administration's efforts continued, with the intention of locating an alternative site with many of the same attributes as were available with the MSU-CHM location. An alternate location has been identified in close proximity to the key institutions in Grand Rapids, allowing for the exploration of inter-professional programming and faculty interactions.

Recent budgetary challenges (see Standard 30) have resulted in reductions to the College's general fund allocation; however, central administration has recognized the importance of the College's Supplemental Faculty budget and the need to maintain the equivalent of 50.0 Faculty FTE to ensure an adequate Student:Faculty ratio (SFR). For the 2010-2011 academic year, all existing open faculty positions have been funded with a single temporary position, to be converted to a faculty position, lost in the fiscal restructuring of the College. Additionally, the importance of the Adjunct Faculty to the operation of the College has also been formally recognized by the University with the extension of additional library privileges to all Adjunct Faculty, allowing for access to the reference based outlined in Standard 29.

Support for the College through other University entities has increased since the filing of the 2004 Self-Study. In collaboration with the College of Professional and Technological Studies located in Grand Rapids, a shared information technology specialist position has been established with the College of Pharmacy receiving 0.2 FTE to support off-campus faculty and their informational needs. This position has significantly improved off-campus faculty IT support.

Despite the fact that over two-thirds of the College's faculty members are located off-campus in clinical practice sites, the College participates in the governance of the University through participation in a broad range of University committees and boards. At the College level, a full complement of committees and task forces ensures appropriate governance within the College and Departments and are codified in the College's Bylaws (see Appendix 5.2). Appendix 5.3 lists the University and College committee membership for the 2009-2010 academic year.

Each College committee and/or administrator is responsible for all tasks assigned as outlined in the College Bylaws (Appendix 5.2). Monitoring and updating all College policies and procedures that fit within the bylaws occurs through formation of an ad hoc committee, called by the Dean. It is expected that revisions will be required to incorporate the new department chair positions into the College's administrative structure.

The Assessment Committee has made steady progress in the development of a curricular and programmatic evaluation plan. The Assessment committee is also responsible for documenting assessment data on all curricular and programmatic outcomes in the University tracking system: TracDat. The College's Assessment Plan is described in more detail in Standard 15.

Admission policies are established by the College through its Admissions Committee, with all criteria delineated by the College autonomously. Implementation of required interviews was a decision made exclusively by the College with appropriate notification to all stakeholders, including the University's Honor Program. Additionally, admission final decisions are made by the Admissions Committee. Legacy admissions are not considered as all students admitted are ranked in a blind process that objectively considers only the criteria identified in the admission formula. Expansion of enrollment occurred between the years 2003 and 2005. The expansion plan, with an annual increase of 10 students over three years, resulted in a first professional year enrollment of 150 by 2005, following initial enrollments of 120 in each class.

Student progression within the curriculum is outlined in the Student Handbook. All policies are determined by the Assistant Dean of Student Affairs and Assessment and members of the Progressions Committee. The University's legal counsel is available to assist the Assistant Dean in all matters of policy and policy enforcement. Appeals of decisions rendered by the Assistant Dean and Progressions Committee proceed to the Executive Committee. These decisions are considered final and supported by University administration.

Responsibility and authority for curricular design and administration of the Doctor of Pharmacy program is vested within the College. The course and curriculum approval process is detailed in Standard 10. All curricular change requires approval from the University Curriculum Committee and the Faculty Senate. These groups do not attempt to design a specific program's or College's curriculum, but conduct reviews to determine the impact of the proposed curricular change and its impact on the University as a whole.

Faculty recruitment is the responsibility of each department. All appointments ultimately rest with the Board of Trustees, as a result of recommendation developed by the search committees and forwarded to the Provost and on to the President.. In the past year, the Department Chairs have played a significant role in recruitment efforts for each department. Faculty and staff development activities are facilitated through the Professional Development Committee and the Faculty Center for Teaching and Learning. Evaluation of non-tenured and tenured faculty is detailed in Standards 25 and 26.

3) **Comments:** Describe a) areas of the program that are noteworthy<sup>6</sup>; b) the program's assessment of its issues and its plans for addressing them with relevant timeframes; or c) findings that highlight areas of concern along with actions or recommendations to address them:

Consistently, College alumni have been appointed to the FSU Board of Trustees, which allows for greater understanding of needs with communication from the College to the Board with two current Board members College alumni. Over the past two years, various Board members have also visited the College with the President and other University administrators during a variety of meetings.

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<sup>6</sup> Examples of Noteworthy Areas: Pharmacy faculty have a history of leadership roles in university-wide committees.

Since the last self-study report, College of Pharmacy faculty members continue to hold leadership roles on University Committees. Examples include: Academic Senate President, Academic Senate Secretary, Academic Senate Executive Board, Chair of the Athletic Advisory Committee, Chair of the Faculty Research Committee, Chair of the Distinguished Faculty Award Committee, and Chair of the Library, Historical and Archives Committee.

**4) Quality Improvements:** Write any additional comments to further advance the quality of the program:

Due to the economic climate in the State of Michigan over the past few years, the University and all individual colleges have scrutinized their budgets. While this can be viewed as a constructive process to work through to improve transparency and ensure efficient use of resources, it has also impacted morale among faculty. A morale committee was formed after a facilitated meeting was held between the College and central administration. While salary equity raises were accomplished last year, it was a very long and arduous process. Presently, no additional outcomes have come from this committee.

Workload has also been a major issue affecting morale. At present, the Pharmacy Practice Department is developing a revised 36-week APPE schedule proposal, with six-week rotations, to begin in the summer of 2012, which will create a more acceptable experiential schedule for faculty members. In addition, the Pharmaceutical Sciences Department has initiated discussions to outline the components of a workload policy, with the intention of developing a new policy in the Fall, 2010, semester.

Recruitment of faculty continues to be an issue for the College. Despite the appointment of six faculty/administrators in 2009-2010, there are currently several open positions due to faculty turn-over and new positions created over the past few years to accommodate the increase in annual student enrollment from 120 to 150. Targeted emphasis should continue in this area as it directly affects workload and morale of current faculty and staff.

5) **Final Evaluation:** Using your best professional judgment, evaluate how well the program meets the standard by putting a check in the appropriate box :

Meets the Standard	Partially Meets the Standard	Does Not Meet the Standard
<ul style="list-style-type: none"> <li>• The college or school is led by a dean.</li> <li>• The college or school has established faculty bylaws and governance.</li> <li>• The college or school is in control of its curriculum.</li> <li>• The college or school is in control of its own admission policy and hiring.</li> <li>• Faculty serve on university-wide committees.</li> </ul> <p><input checked="" type="checkbox"/> <b>Meets the Standard</b></p>	<ul style="list-style-type: none"> <li>• The college or school is led by a temporary or interim dean and is in the search process for a permanent dean.</li> <li>• The college or school is developing faculty bylaws and governance and there is evidence that they will be implemented.</li> <li>• The college or school has a plan and is in the process of addressing all issues related to not meeting the requirements of this standard.</li> <li>• The dean lacks autonomy in certain areas or has undue outside influences.</li> </ul> <p><input type="checkbox"/> <b>Partially Meets the Standard</b></p>	<ul style="list-style-type: none"> <li>• The college or school has no dean.</li> <li>• The college or school is led by a temporary or interim dean for an extended period.</li> <li>• The college or school has no faculty bylaws and governance or uses the university bylaws without having them formally accepted by the faculty.</li> <li>• The college or school is not in control of its curriculum.</li> <li>• The school is not in control of its own admission policy and hiring.</li> </ul> <p><input type="checkbox"/> <b>Does Not Meet the Standard</b></p>

**Standard No. 6: College or School and other Administrative Relationships:** The college or school , with the full support of the university, must develop suitable academic, research, and other scholarly activity; practice and service relationships; collaborations; and partnerships, within and outside the university, to support and advance its mission and goals.

1) Use the checklist below to rate the program on the requirements of the standard and accompanying guidelines:

	S	N.I.
The college or school, with the full support of the university, develops suitable academic, research, and other scholarly activity; practice and service relationships; collaborations; and partnerships, within and outside the university, to support and advance its mission and goals.	<input checked="" type="radio"/>	<input type="radio"/>
The relationships, collaborations, and partnerships advance the desired outcomes of the professional degree program, research and other scholarly activities, service and pharmacy practice programs.	<input checked="" type="radio"/>	<input type="radio"/>
The college or school has addressed the guidelines for this standard.	<input checked="" type="radio"/>	<input type="radio"/>

2) **Describe** how the program is meeting the Standard and Guidelines. *(On average, text responses for this item, combined with text responses addressing items 3 and 4 below should not exceed 4 pages (4 pages/standard X 30 standards = 120 total text pages to address items 2,3, and 4 for each standard)*

Scholarly activity within the College has increased since the last accreditation report. The skills and acumen required for scholarship is fully supported by the University through many avenues including the Faculty Center for Teaching and Learning, Media Production, and the Office of Grants and Sponsored Research. Some faculty members are utilizing these resources to generate original research and secure grant funding. The faculty are also consistently involved in preparing and delivering ACPE accredited CE presentations through our annual Fall and Spring seminars, preceptor development conference, the Michigan Pharmacists Association Annual Convention and Exposition, as well as many other presentations delivered at their respective institutions or for local organizations. The College report to alumni provides several examples of all types of scholarly activity conducted by faculty (full report available on-site).

The College has established formal and informal affiliations with numerous academic and practice institutions as a result of its distributed didactic and experiential programming. The most substantial of these exist between the College, the Kalamazoo Center for Medical Studies (KCMS) and Western Michigan University (WMU) in Kalamazoo, and with the Grand Rapids Medical Education Partners (GRMEP) in Grand Rapids. Within these sites, offices, classroom facilities and recreational spaces are provided for students, faculty, and staff. Rooms are equipped to provide distance-learning instructional capabilities for the P3 didactic curriculum. The affiliations with KCMS and GRMEP have recently been revised to better reflect the College's focus on inter-disciplinary education and collaborative community efforts in contrast to financial support and fiscal decision making. Financial committees, of which the College is not a member, have been formed at both KCMS and GRMEP. The College intends to use this new structure to investigate innovative opportunities for collaboration while maintaining existing clinical and instructional commitments. In addition, shared affiliations also exist in Marquette, Flint, Lansing and Saginaw. Local, "clinical" affiliations between the Colleges of Pharmacy and Human Medicine are established through faculty-based practice and research collaborations. Several College faculty members have adjunct faculty appointments in the Michigan State University College of Human Medicine. Additionally, several faculty members have taught for local Colleges and Universities.

Approximately 250 affiliation agreements have been established between the College and teaching hospitals, clinics, community pharmacies, and other non-traditional practice settings throughout the State of Michigan. These arrangements generally follow the University's standard Affiliation Agreement, with exceptions closely reviewed by the University's legal counsel. Many of these sites involve collaboration between an on-site faculty member(s) and administrative members of individual pharmacy departments, allowing students to develop advanced experiential skills and training in the fourth professional (P4) year. As a result of the faculty members' presence, a number of



scholarly activities have developed between FSU and the respective institutions. Additionally, international affiliation agreements have been established with two pharmacy programs – the University of Bath in the United Kingdom and the University of Angers in France.

In addition to the conventional faculty and adjunct affiliated sites, the College has established “expanded affiliations” with five institutions to provide experiential education to assigned students on a consistent basis, with up to five students assigned for 10 months each year. Rotations offered include required and elective. The expanded affiliations provide APPE instruction similar to a faculty member, with students assigned throughout the year based on scheduling need, not the site’s preference. Funding is provided to the sites based on a schedule developed by the Pharmacy Practice Department. (More data on affiliations is available on site)

The College has collaborated with Meijer Pharmacy and Pfizer Inc. in the establishment and operation of a pharmacy practice residency program with emphasis in Community Practice. The Community Pharmacy Practice Residency was established in 2001 and retroactively accredited in 2003. Responsibilities of the resident include development and implementation of patient care service programs for Meijer Pharmacy and longitudinal experiences with both Pfizer and the College. The residency program is jointly accredited by the American Pharmacists Association and the American Society of Health-systems Pharmacists.

Currently, the College of Pharmacy does not have a formal affiliation with other academic or service units within the University. However, instructional support for pharmacology courses in the Michigan College of Optometry has been provided through Spring 2010. The College continues to participate in an inter-professional clinic with Ferris State University optometry and nursing students. This collaborative clinic provides an interdisciplinary approach to the management of patients with diabetes.

Additionally, the College has two inter-professional education didactic elective courses. The Inter-professional Elder Initiative is a two credit elective course offered in the third professional (P3) year in collaboration with nursing students from Grand Valley State University. Both disciplines provide health care to the elderly in their homes during structured visits. The Engaged Partners Program is also a two-credit elective course offered in the P3 year. The program partners pharmacy students, nursing students from Grand Rapids Community College and medicine students from Michigan State University. The groups address health care needs of refugees living in Grand Rapids through workshops and home visits.

- 3) **Comments:** Describe a) areas of the program that are noteworthy<sup>7</sup>; b) the program’s assessment of its issues and its plans for addressing them with relevant timeframes; or c) findings that highlight areas of concern along with actions or recommendations to address them:

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<sup>7</sup> Examples of Noteworthy Areas: Administrative officers of university hospitals are completely integrated into the faculty.

The College has developed an impressive network of clinical practice sites that encompasses the State of Michigan. This network requires significant support by the College to ensure consistency from site to site and to provide preceptors with a clear understanding of their role and responsibility within the curriculum. Further, the College has increased its efforts to ascertain that students meet all standard site requirements through the establishment of a “Clinical Passport” system. Non-standard site requirements are communicated to students through the experiential scheduling software interface. In addition, through the efforts of the Director of External Clinical Operations, affiliation agreements are now established consistently before students are assigned to a site.

Emphasis has been placed on faculty, as well as adjunct faculty development within the College. The preceptors’ conference is now offered on an annual basis and topics include areas that are critical to successful interactions between students and preceptors.

Efforts are underway to develop inter-professional education opportunities for students and faculty. Several experiences are outlined above. Additionally, the College is participating with Grand Valley State University and Michigan State University College of Human Medicine to develop an inter-professional curriculum for students in the Grand Rapids area. This effort is ongoing with frequent meetings attended by the Pharmacy Practice Department Chair.

**4) Quality Improvements:** Write any additional comments to further advance the quality of the program:

Efforts to codify all processes related to students’ clearance for experiential placements are dependent on a significant coordination effort currently managed by the Director of External Clinical Operations. As successive classes enter, the quantity of data to be managed has increased significantly requiring adoption of a comprehensive scheduling software platform. It is imperative that a more comprehensive scheduling/data organization system be adopted by the College. Constant maintenance of the College’s affiliation agreements currently demands a significant commitment of time and, similarly, a management system must be adopted. Current plans call for implementation in early fall, 2010, of a more robust system that will provide support for all experiential scheduling, site management and evaluation needs.

Development of collaborative research opportunities with internal and external stakeholders must be discussed by the College faculty and administration. As the University maintains a teaching-focused mission, tension is created as research efforts are undertaken by faculty members with expectations of reductions in teaching responsibilities. Integration of the Department Chairs into department activities and mentoring will assist faculty in achieving an appropriate balance. Further, continued professional development programming focused on research-based topics will provide faculty with additional skills to achieve a sustainable faculty assignment.

5) **Final Evaluation:** Using your best professional judgment, evaluate how well the program meets the standard by putting a check in the appropriate box :

Meets the Standard	Partially Meets the Standard	Does Not Meet the Standard
<ul style="list-style-type: none"> <li>The college or school has strong ties with health institutions and sister organizations.</li> </ul>	<ul style="list-style-type: none"> <li>The college or school has weak ties with university health institutions and sister organizations.</li> <li>The college or school has a plan and is in the process of addressing all issues related to not meeting the requirements of this standard.</li> </ul>	<ul style="list-style-type: none"> <li>The college or school has no formal ties with health institutions and sister organizations.</li> </ul>
<input checked="" type="checkbox"/> <b>Meets the Standard</b>	<input type="checkbox"/> <b>Partially Meets the Standard</b>	<input type="checkbox"/> <b>Does Not Meet the Standard</b>

**Standard No. 7: College or School Organization and Governance:** The college or school must be organized and staffed to facilitate the accomplishment of its mission and goals. The college or school administration must have defined lines of authority and responsibility, foster organizational unit development and collegiality, and allocate resources appropriately. The college or school must have published, updated governance documents, such as bylaws and policies and procedures, which have been generated by faculty consensus under the leadership of the dean in accordance with university regulations.

1) Use the checklist below to rate the program on the requirements of the standard and accompanying guidelines:

	S	N.I.
The college or school is organized and staffed to facilitate the accomplishment of its mission and goals.	<input type="radio"/>	<input checked="" type="radio"/>
The college or school administration has defined lines of authority and responsibility, fosters organizational unit development and collegiality, and allocates resources appropriately.	<input checked="" type="radio"/>	<input type="radio"/>
The college or school has published, updated governance documents, such as bylaws and policies and procedures, which have been generated by faculty consensus under the leadership of the dean in accordance with university regulations.	<input checked="" type="radio"/>	<input type="radio"/>
If the college or school organizes its faculty into subunits, such as departments or divisions, subunit goals and objectives align with the mission and goals of the college or school. N/A (no subunits) <input type="checkbox"/>	<input checked="" type="radio"/>	<input type="radio"/>
The effectiveness of each organizational unit is evaluated on the basis of its goals and objectives and its contribution to the professional program.	<input type="radio"/>	<input checked="" type="radio"/>
Faculty meetings and committees established to address key components of the mission and goals are part of the system of governance of the college or school.	<input checked="" type="radio"/>	<input type="radio"/>
Where appropriate, faculty committees include staff, students, preceptors, alumni, and pharmacy practitioners.	<input checked="" type="radio"/>	<input type="radio"/>
Minutes of faculty meetings and committee actions are maintained and communicated to appropriate parties.	<input checked="" type="radio"/>	<input type="radio"/>
The college or school has policies and procedures that address potential systems failures, whether such failures are technical, administrative, or curricular.	<input checked="" type="radio"/>	<input type="radio"/>
Contingency planning includes creating secure backups of critical applications and systems data, providing mechanisms for making up lost course work and academic credit, securing alternate means for communication and information delivery, and creating exit strategies to protect students if part or all of a program loses viability.	<input checked="" type="radio"/>	<input type="radio"/>
The college or school's administration is aware of problems and issues of the student body.	<input checked="" type="radio"/>	<input type="radio"/>
A clear process exists for students to follow to raise issues with the college or school administration.	<input checked="" type="radio"/>	<input type="radio"/>
The college or school administration responds to problems and issues of concern to the student body.	<input type="radio"/>	<input checked="" type="radio"/>
The administration is aware of faculty needs/problems.	<input checked="" type="radio"/>	<input type="radio"/>
The administration is responsive to faculty needs/problems.	<input checked="" type="radio"/>	<input type="radio"/>
Alternate program pathways are integrated into the college or school's regular administrative structures, policies, and procedures (including planning, oversight, and evaluation), and are supervised by an administrator who is part of the college or school. N/A (no alt. pathways) <input checked="" type="checkbox"/>	<input type="radio"/>	<input type="radio"/>
The college or school ensures that workflow and communication among administration, faculty, staff, preceptors, and students engaged in distance-learning activities are maintained. N/A (no alt. pathways) <input checked="" type="checkbox"/>	<input type="radio"/>	<input type="radio"/>
The college or school retains ultimate responsibility for the academic quality and integrity of distance-learning activities and the achievement of expected and unexpected outcomes, regardless of any contractual arrangements, partnerships, or consortia for educational or technical services. N/A (no alt. pathways) <input checked="" type="checkbox"/>	<input type="radio"/>	<input type="radio"/>
The college or school has addressed the guidelines for this standard.	<input checked="" type="radio"/>	<input type="radio"/>

2) **Describe** how the program is meeting the Standard and Guidelines. (On average, text responses for this item, combined with text responses addressing items 3 and 4 below should not exceed 4 pages (4 pages/standard X 30 standards = 120 total text pages to address items 2,3, and 4 for each standard)

The College has implemented a modified administrative structure to address existing deficiencies and fiscal restructuring. The College's Executive Committee consists of the Dean, the Associate Dean, the Assistant Dean for Student Affairs and Assessment (ADSAA) and two Department Chairs. The Department Chairs are classified as faculty members, to address day-to-day issues that arise within the departments and to provide additional perspective to the deliberations of the Dean, Associate Dean and Assistant Deans. This structure was implemented during the 2009-2010 academic year to address the loss of the Assistant Dean/Department Head for Pharmaceutical Sciences and to separate the Associate Dean and Department Head for Pharmacy Practice roles that had been previously assigned to a single position. This new structure has been effective in providing communication avenues and organizational structure for the College's faculty. In addition the structure provides parity between the departments, which had not existed in the previous organizational structure. This restructuring also increased support for assessment within the College by assigning all assessment responsibilities to the ADSAA with 50% of responsibilities relating directly to assessment activities. Faculty evaluation of the Assessment Committee's efficacy will likely improve with this additional support.

Further strengthening administrative resources are two administrative positions - the Director of Off-Campus Student Services (DOCSS) and the Director of External Clinical Operations (DECO). The DOCSS position augments the ADSAA's on-campus activities providing comprehensive coverage for all student-related activities in the College including admissions, registration, recruiting, counseling (both academic and career), student records, progression, and commencement. The DECO supplements activities and responsibilities of the Associate Dean and the experiential team to maintain affiliation agreements and track all non-academic experiential requirements. Coordination of experiential programming is divided among three faculty members, forming the "experiential team." Team-taught courses are coordinated by faculty members assigned by the Department Chairs. Because of the widely distributed nature of the Pharmacy Practice Department, the DECO chairs a monthly meeting that includes the Pharmacy Practice Department Chair, Pharmacy Practice course coordinators, the experiential team and Pharmacy Practice administrative assistants. Additional College staff include three administrative assistants (one at each instructional site), three on-campus clerical staff members (two with blended assignments), an account clerk and four IT technicians (see Standard 24).

College Governance is codified in the *College Mission Statement*, the *Department Mission Statements*, the *Policy Statement on Standing, Procedural*, and *Ad Hoc Committees* (the Bylaws), the *FSU/FFA Collective Bargaining Agreement* and all applicable University policies. The College Bylaws specifies the composition and responsibility of each standing committee. Term limits within the committees ensures that all faculty members have the opportunity to play a

meaningful role in the governance and operations of the College on a rotating basis. Based on the 2007 faculty data, the committee structure covers curricular development, evaluation and improvement as 83.3% agreed. Bylaws are updated by each respective committee as necessary; however, a bylaws ad hoc committee has been formed in the past when a complete revision was needed. Appendices 5.2 and 5.3 contain the College bylaws and the 2009-2010 College and University committee roster. A task force is in place to develop an electronic faculty handbook.

An employment contract and collective bargaining agreement between the University and the Ferris Faculty Association (FFA) defines basic elements of University and College governance and is applicable to all faculty members with a 0.5 FTE or greater appointment. All collective bargaining agreements are available at:

<http://www.ferris.edu/htmls/administration/president/generalcounsel/laborrelations.html>

Meetings are scheduled separately for each department, generally on a monthly basis as warranted. These meetings provide for departmental business to be conducted regularly. College-wide meetings are scheduled in May, August and December with additional meetings scheduled when needed. Committee proceedings and decisions are communicated to faculty members through standing committee reports held in the monthly departmental meetings with required full-faculty discussion occurring at one of the College-wide faculty meetings. This method of dissemination of committee proceedings ensures that both departments have thorough discussion of committee decisions, although a limited schedule of College-wide meetings may delay full-faculty discussions that are often of a broader scope. E-voting has been effectively utilized to facilitate timely approvals. Dissemination of committee proceedings is generally limited to members of the College faculty and staff. A majority of faculty members agree or strongly agree that faculty meetings function effectively with 60% in 2007 and 66.7% in 2009. Noteworthy items are presented at the COP Alumni Advisory Board meetings held three times annually or at the annual National Advisory Council meeting. Significant developments are also included in the COP Alumni Newsletter that is published bi-annually. Additionally, the College has an Experiential Advisory Board. This Board consists of volunteer adjunct faculty with a purpose to brainstorm and gather feedback on current or proposed experiential policies, procedures, requirements or rotation content.

Contingency planning within the College relies on the University infrastructure including IT systems backup and data storage backup. The Executive Committee serves as the initial chain of communication should a College-wide or University-wide event precipitate need for emergent communication. Because of the size of the College's enrollment, there is no specific plan developed in the event the Doctor of Pharmacy program loses viability; however, based on the academic quality of the students, there is a strong likelihood that they could gain entry into other programs within the University.

The student complaint procedure was updated by the ADSAA and is now routinely reviewed with all incoming students. This policy as well as survey data related to student process for raising issues and College

response to student issues is further outlined in Standards 20 and 22. College administrators routinely operate under an open-door policy with regard to student complaints. On a formal basis, the Dean's Advisory Board provides P1 and P2 student perspectives to the Executive Committee and the DOCSS conducts a Student Advisory Board at each instructional site, relaying concerns to the Executive Committee. Although routinely aware of student problems and engaged in constructive solutions, the actions of the Executive Committee are often not communicated to students or faculty in an open manner because of the need for discretion.

**3) Comments:** Describe a) areas of the program that are noteworthy<sup>8</sup>; b) the program's assessment of its issues and its plans for addressing them with relevant timeframes; or c) findings that highlight areas of concern along with actions or recommendations to address them:

Regular use of the AACP/ACPE survey battery has provided a more complete picture of the assessment of administration in the College by various stakeholders including faculty and students. In light of that information, several achievements are notable including: 90.4% of the faculty members view the curriculum committee as effective; 68.7% of alumni feel the College communicates effectively with them. 85.7% and 71.4% of faculty feel that the administration is aware and responsive to faculty need/problems. This positive data is likely based on completion of the Department Chair appointments and the series of "transparency meetings" held with University administrators, Board of Trustee members and the faculty in 2008 and 2009. Compared with 53.5% in 2007, 95.2% of faculty are now aware of policies for harassment and discrimination. This is most likely due to the visible role the University's Chief Diversity Officer now plays in university operations and the increased activity of the College's Diversity Committee.

**4) Quality Improvements:** Write any additional comments to further advance the quality of the program:

Faculty perceptions of the administrative function have been critical of administrative structure and effectiveness with only 33.4% SA/A that job descriptions are clear and complete and 42.9% SA/A that the administrative team works in a unified manner. With appointment of the ADSAA and the Department Chairs, both in 2009, improvement in these evaluations is expected; however, job descriptions will need to be written for the Department Chair positions.

The percentage of faculty who feel we have an effective faculty recruitment process is 57.1%. This data may reflect our difficulties each year to recruit and retain at a level to keep up with the normal rate of faculty turnover as well as our increase in faculty positions that correlate with our increase in enrollment from 120 to 150. These additional open positions were approved to account for the increase in student enrollment. Targeted emphasis should continue in this area and may be addressed by the newly appointed Department Chairs.

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<sup>8</sup> Examples of Noteworthy Areas: Each organizational unit is reviewed annually.

Administration of the Pharmacy Practice Department is exacerbated by the wide geographic distribution of faculty members. This was initially addressed with the appointment of an Interim Department Head in 2008, which returned to a faculty position in 2009, and was replaced by a Department Chair. With over 30 FTE's within the Department, a single Department Chair, maintaining faculty responsibilities, is challenged to meet all expectations of both senior and entry-level faculty members. Additionally, in 2009, 52.3% of faculty members agree that they receive adequate support staff resources. This data is likely related to the expansion of the experiential program, need for full time administration of the Pharmacy Practice Department and the wide spread distribution the faculty within this department. Additional support staff resources or a restructuring of support staff services is needed.

At the University level, evaluation of the Dean is being piloted currently, with expansion expected in the 2010-2011 year. This pilot project has provided a 360-degree evaluation of one Dean (Allied Health Sciences) and one Vice President within the University. Expansion to the Associate and Assistant Dean positions can be expected. The inability of faculty to evaluate administrators is seen as a deficiency in the *Faculty Survey* data. Similarly, a formal assessment of each department based on its goals and objectives is not carried out. It is anticipated that programmatic assessment will be carried out through evaluation of the AACCP Survey Data.

5) **Final Evaluation:** Using your best professional judgment, evaluate how well the program meets the standard by putting a check in the appropriate box :

Meets the Standard	Partially Meets the Standard	Does Not Meet the Standard
<ul style="list-style-type: none"> <li>• The organizational structure has appropriate channels of communication and faculty, staff and students are made aware of the chain of command within the college or school.</li> <li>• Specific review procedures exist for each organizational unit. Each organizational unit evaluates itself on its goals, objectives and contribution to the professional program. The procedures themselves are reviewed at least once every 6 years in conjunction with the self-study process.</li> <li>• Bylaws are current, approved, and adopted by the faculty. They are functional, truly guiding the activities of the faculty who are observing the letter and spirit of the document.</li> <li>• The organizational chart accurately and appropriately reflects direct and indirect reporting structures.</li> <li>• The organizational structure and staffing facilitates achievement of the mission and goals.</li> </ul>	<ul style="list-style-type: none"> <li>• The college or school is developing or updating review procedures for each organizational unit and there is evidence to show that they will be implemented.</li> <li>• The college or school is developing or updating faculty bylaws and governance and there is evidence to show that they will be implemented.</li> <li>• The organizational chart does not accurately reflect direct and indirect reporting structures.</li> <li>• The college or school has a plan and is in the process of addressing all issues related to not meeting the requirements of this standard.</li> </ul>	<ul style="list-style-type: none"> <li>• The college or school has no bylaws.</li> <li>• Decisions are made outside the process outlined by the bylaws.</li> <li>• The college has no defined lines of authority or responsibility.</li> <li>• The college or school has no defined communication channels for faculty, staff and students.</li> <li>• Faculty or students routinely do not respect the chain of command when dealing with administrative or student issues.</li> <li>• The organizational structure or insufficient staffing impedes achievement of the mission and goals.</li> <li>• Organizational units do not collaborate to facilitate achievement of the mission and goals.</li> <li>• The college or school does not have or has inadequate policies and procedures to address potential systems failures.</li> <li>• Alternate program pathways are not integrated into the college or school's administrative structures, policies and procedures or are not supervised by a college or school administrator.</li> </ul>
<input type="checkbox"/> Meets the Standard	<input checked="" type="checkbox"/> Partially Meets the Standard	<input type="checkbox"/> Does Not Meet the Standard



**Standard No. 8: Qualifications and Responsibilities of the Dean:** The dean must be qualified to provide leadership in pharmacy professional education and practice, including research, scholarly activities, and service. The dean must be the chief administrative and academic officer and have direct access to the university president or other university officials delegated with final responsibility for the college or school. The dean must unite and inspire administrators, faculty, staff, preceptors, and students toward achievement of the mission and goals. The dean is responsible for ensuring that all accreditation requirements of the ACPE are met, including the timely submission of all reports and notices of planning for substantive changes.

1) Use the checklist below to rate the program on the requirements of the standard and accompanying guidelines:

	S	N.I.
The dean is qualified to provide leadership in pharmacy professional education and practice, including research, scholarly activities, and service.	●	○
The dean is the chief administrative and academic officer and has direct access to the university president or other university officials delegated with final responsibility for the college or school.	●	○
The dean unites and inspires administrators, faculty, staff, preceptors, and students to achieve the mission and goals.	○	●
The dean is responsible for ensuring that all accreditation requirements of the ACPE are met, including the timely submission of all reports and plans for substantive changes.	●	○
The dean has the assistance and full support of the administrative leaders of the college or school's organizational units and adequate staff support. In instances where the dean is assigned other substantial administrative responsibilities within the university, arrangements for additional administrative support to the office of the dean are made to ensure effective administration of the affairs of the college or school.	●	○
The dean is responsible for compliance with ACPE's accreditation standards, policies, and procedures. In the event that remedial action is required to bring the college or school into compliance, the dean takes the necessary steps to ensure compliance in a timely and efficient manner.	●	○
Faculty receive adequate support from the dean.	●	○
The qualifications and characteristics of the dean relate well to those called for in the standards (i.e., <ul style="list-style-type: none"> <li>• a degree in pharmacy or a strong understanding of contemporary pharmacy and health care systems</li> <li>• a scholarly concern for the profession, generally, and for the diverse aspects of pharmacy practice, in particular publications in pharmacy and biomedical literature in areas relevant to the mission and goals of the college or school</li> <li>• appropriate leadership and managerial skills and experience in the academic (preferred) or health care sectors</li> <li>• strong written and interpersonal communication skills</li> <li>• a commitment to systematic planning, assessment, and continuous programmatic improvement</li> <li>• a commitment to teaching and student learning, including pedagogy</li> <li>• a commitment to the advancement of research and scholarship</li> <li>• the ability and willingness to provide assertive advocacy on behalf of the college or school to the university administration</li> <li>• the ability and willingness to provide assertive advocacy on behalf of the college or school and the profession of pharmacy in community, state, and national health care initiatives</li> <li>• a record of and willingness to continue active participation in the affairs of pharmacy's professional and scientific societies).</li> </ul>	●	○
The dean is responsible for directly or indirectly ensuring:		
• development, articulation, and implementation of the mission and goals	●	○
• acceptance of the mission and goals by the stakeholders	●	○
• development, implementation, evaluation, and enhancement of the educational, research, service, and pharmacy practice programs	●	○
• development and progress of the strategic plan and the evaluation plan, including assessment of outcomes	●	○
• recruitment, development, and retention of competent faculty and staff	●	○
• initiation, implementation, and management of programs for the recruitment and admission of qualified students	●	○
• establishment and implementation of standards for academic performance and progression	●	○
• resource acquisition and mission-based allocation	●	○
• continuous enhancement of the visibility of the college or school on campus and to external stakeholders	●	○
The college or school has addressed the guidelines for this standard.	●	○

2) **Describe** how the program is meeting the Standard and Guidelines. *(On average, text responses for this item, combined with text responses addressing items 3 and 4 below should not exceed 4 pages (4 pages/standard X 30 standards = 120 total text pages to address items 2,3, and 4 for each standard)*

Ian Mathison, PhD, DSc was appointed Dean of the College of Pharmacy in 1977. He received degrees in Pharmacy and Medicinal Chemistry from the University of London. He has a long history of presentations, publications, grants and awards in the area of medicinal chemistry. He attends national and international meetings on a regular basis. With over 40 years in pharmacy education, he has actively participated in the evolution of pharmacy practice and education from its earlier focus on order fulfillment to its increasing focus on patient care and achievement of therapeutic outcomes. In addition to his direct involvement, his professional relationships with practitioners, Alumni Advisory Board members, professional organizations and the College faculty have provided a contemporary understanding of the profession's evolution. Professional networking through frequent attendance at regional and national meetings and through his service on numerous national advisory boards provides an effective mechanism to stay abreast of professional developments. Board membership includes the Board of Directors for the Kalamazoo Center for Medical Studies (KCMS) and the Michigan Joint Commission for Pharmacy Practice, comprised of the three Michigan Colleges of Pharmacy, the Michigan Board of Pharmacy, and the Michigan Pharmacists Association, including health systems and community pharmacist representatives. In addition, during his tenure, the Dean has represented the College on a variety of national boards including the AACP Board of Directors and the NCPA Foundation.

Within the University, the Dean serves as an advocate for the College in all aspects of operational needs. Recently, under his guidance, the Alumni Advisory Board established the Alumni Board of Directors Scholarship Program. The Dean played an instrumental role in securing the faculty salary equity adjustments and through his leadership, consolidation of the P3 year in a single location has moved forward. Formally the University's Deans meet collectively with the Vice-President of Academic Affairs in a Dean's Council meeting every two weeks. In addition, individual meetings with the Vice President are scheduled monthly or more frequently as issues arise. The President of the University has an open-door policy and is accessible to the Dean whenever it is necessary. With over 30 years experience as the College's Dean, Dr. Mathison is frequently called upon for opinions relating to the College and University.

During the last 33 years, the College has seen many changes including curricular revision, development of the track-through Doctor of Pharmacy program and the post-baccalaureate Doctor of Pharmacy program, the entry-level Doctor of Pharmacy program and two pharmacy practice residencies. All of these programs and developments brought with them a commensurate expansion of faculty, affiliated practice sites and off-campus instructional sites. The College's ability to provide funding for both program essentials and enhancements is the result of the Dean's outstanding relationship with corporate and private benefactors as well as the College's alumni.

The College has a standing Accreditation Committee which serves to ensure compliance with the ACPE's accreditation standards, policies and procedures. The Associate Dean chairs this committee.

- 3) **Comments:** Describe a) areas of the program that are noteworthy<sup>9</sup>; b) the program's assessment of its issues and its plans for addressing them with relevant timeframes; or c) findings that highlight areas of concern along with actions or recommendations to address them:

The notable tenure of the Dean has resulted in stability and consistency within the College. As noted earlier, through his constant efforts, student scholarship awards have increased steadily, with nearly \$170,000 awarded in this past year; since 2004, over \$800,000 has been awarded to P1 through P4 students. This significant contribution to student support is provided by individual and corporate sponsors as a direct result of their professional and personal relationship with the Dean.

- 4) **Quality Improvements:** Write any additional comments to further advance the quality of the program:

The relationship between the Faculty and the Dean was evaluated in the *AACP/ACPE Faculty Survey* in 2007 and 2009, with 10% and 19.1% respectively strongly agreed or agreed (SA/A) that the Dean is an effective leader. Efforts over the past year to secure faculty salary increases, the continued efforts to increase transparency in the College, and the recent efforts to minimize the impact of University budgetary reductions on college operations may lead to an improvement in the faculty's evaluation of the Dean's leadership skills. In contrast to these data, the *AACP/ACPE 2008 Alumni Survey* revealed a significantly higher evaluation of the Dean with 58.9% SA/A that the Dean provides leadership in pharmacy and 50.9% SA/A that the Dean encourages alumni to stay involved. Further discussions between the College and administration, including the Dean, are planned to discuss the existing relationship and methods to improve College leadership.

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<sup>9</sup> Examples of Noteworthy Areas: Faculty, staff, students, and university officials consistently and enthusiastically support the Dean.

5) **Final Evaluation:** Using your best professional judgment, evaluate how well the program meets the standard by putting a check in the appropriate box :

Meets the Standard	Partially Meets the Standard	Does Not Meet the Standard
<ul style="list-style-type: none"> <li>• The dean has a clearly articulated job description that is readily accessible by all.</li> <li>• Faculty and students support the dean's activities.</li> <li>• The dean meets with the executive committee regularly.</li> <li>• The dean has options for advising and shared decision-making when needed.</li> <li>• The dean has a full compliment of administrative-support personnel, (budget, development, etc.).</li> <li>• The dean will make unpopular decisions when necessary, but is still able to retain support.</li> <li>• The dean takes steps to clearly communicate decisions.</li> <li>• The dean has good communication with the university administration and alumni.</li> <li>• The dean has a clearly-identified chain-of-command and is supported by administrators who have the authority to make decisions in the dean's absence.</li> <li>• The dean is engaged in development (funding) activities and is able to acquire resources needed to support the college or school.</li> <li>• The dean is actively engaged in the profession outside the school.</li> </ul>	<ul style="list-style-type: none"> <li>• The dean is not willing to delegate or share authority with administrators and support personnel.</li> <li>• The dean's job description does not accurately articulate his/her responsibilities.</li> <li>• The college or school has a plan and is in the process of addressing all issues related to not meeting the requirements of this standard.</li> </ul>	<ul style="list-style-type: none"> <li>• The dean is a poor communicator or leader.</li> <li>• There is a widespread feeling of faculty unrest or dissatisfaction at the college or school.</li> <li>• Faculty or university officials are not supportive of the dean.</li> <li>• The dean does not defend the college or school.</li> <li>• The dean is not adequately qualified.</li> <li>• The dean is not involved with the profession.</li> </ul>
<input checked="" type="checkbox"/> <b>Meets the Standard</b>	<input type="checkbox"/> <b>Partially Meets the Standard</b>	<input type="checkbox"/> <b>Does Not Meet the Standard</b>

## **c. Curriculum**

### **For Standards 9-15:**

Use a check  to indicate the information evaluated to assess the standards in this section:

- Description of the professional competencies of the Curriculum. (9)
- Licensing statistics of graduates (e.g., North American Pharmacist Licensure Examination™ (NAPLEX®) and Multistate Pharmacy Jurisprudence Examination® (MPJE®)) for the last 5 years including first-time pass rates and competency area scores. (9, 15)
- Description of the curricular structure. (10)
- Demonstrate how both the didactic and experiential components meet the Standards for core curriculum and IPPE and APPEs in regard to percentage of curricular length. (10)
- Description of how the results of curricular assessments are used to improve the curriculum. (10)
- Demonstrate how the components and contents of the curriculum are linked to the expected competencies and outcomes through curricular mapping or other techniques. (10)
- Description of any nontraditional pathway(s) leading to the Doctor of Pharmacy degree. **(If Applicable)**(10)
- Description of the members of the Curriculum Committee (or equivalent) and charges in the last academic year. (10)
- Description of teaching and learning methods used in the curriculum, including nontraditional pathway(s) leading to the Doctor of Pharmacy degree (if applicable). (11)
- Description of efforts to address the diverse learning needs of students. (11)
- Data that link teaching-and-learning methods with curricular outcomes (Standards 3, 10 and 15). (11)
- Examples of instructional tools, such as portfolios **(to be made available on-site)**, used by students to assist them in assuming responsibility for their own learning and for measuring their achievement. (11, 15)
- Description of both formative and summative assessments used to evaluate teaching and learning methods used in the curriculum, including nontraditional pathway(s) leading to the Doctor of Pharmacy degree **(if applicable)** (Standards 3, 10 and 15). (11)
- List of the professional competencies and outcome expectations for the professional program in pharmacy. (12)
- Examples of didactic and experiential course syllabi, including stated outcomes related to desired competencies **(to be made available on-site)**. (12, 13)
- Description of the assessment measures and methods used to evaluate achievement of professional competencies and outcomes along with evidence of how feedback from the assessments is used to improve outcomes (Standards 3, 9, 10 and 15). (12)
- Description of the curricular structure and content of all curricular pathways. (13)
- Description of how the curricular content for all curricular pathways is linked to Appendix B of Standards 2007 through mapping or other techniques. (13)
- Examples of assessment and documentation of student performance and the attainment of desired core knowledge, skills and values (Standards 3, 9, 10 and 15). (13)
- Evidence that knowledge, practice skills and professional attitudes and values are integrated, reinforced and advanced throughout the curriculum, including the pharmacy practice experiences. (13)
- Introductory and advanced pharmacy practice experience manuals, including assessment forms **(to be made available on-site)**. (14)
- List of introductory and advanced pharmacy practice experience sites and locations offered in the previous academic year, with sites affording student interactions with other health care professionals designated. (14)
- The objectives for each required pharmacy practice experience and the responsibilities of the student, preceptor, and site. (14)
- Examples of assessment and documentation of student performance, nature and extent of patient and health care professional interactions, and the attainment of desired outcomes (Standards 3, 9, 10 and 15). (14)
- List of current preceptors with details of credentials (including licensure) and practice site. (14)
- Description of how the aggregate experiential programs address students having direct interactions with diverse patient populations in a variety of health care settings. (14)
- Aggregate data from students about the type (diverse) and number of patients, problems encountered, and interventions. (14)
- Evidence of assuring, measuring, and maintaining quality of the site. (14)
- Examples of quality improvement as a result of the practice site assessments. (14)
- Description of assessment measures used to evaluate student learning and curricular effectiveness. (15)
- Examples of assessment instruments and activities employed, including comparisons with national data and, if desired, selected peer-group programs (include a description of the basis for the peer-group selection) and trends over time (Standard 3, 9 and 10). (15)

- Examples of how assessment data has been used to improve student learning and curricular effectiveness (Standards 3,9 and 10). (15)
  - Assessments of teaching-and-learning methods used in the curriculum, including nontraditional pathway(s) leading to the Doctor of Pharmacy degree (if applicable) Standards 3, 9, and 10). (15)
  - Assessment measures and methods to evaluate achievement of professional competencies and outcomes (Standards 3, 9, 10 and 12). (15)
  
  - Interpretation of the data from the AACP Surveys of Students, Faculty, Preceptors and Alumni.
  - Raw data from the AACP Surveys of Students, Faculty, Preceptors and Alumni.
  - Other documentation or data that provides evidence of meeting the standard.
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**Standard No. 9: The Goal of the Curriculum:** The college or school's professional degree program curriculum must prepare graduates with the professional competencies to enter pharmacy practice in any setting to ensure optimal medication therapy outcomes and patient safety, satisfy the educational requirements for licensure as a pharmacist, and meet the requirements of the university for the degree.

The curriculum must develop in graduates knowledge that meets the criteria of good science;<sup>10</sup> professional skills, attitudes, and values; and the ability to integrate and apply learning to both the present practice of pharmacy and the advancement of the profession. Graduates must be able to identify and implement needed changes in pharmacy practice and health care delivery.

1) Use the checklist below to rate the program on the requirements of the standard and accompanying guidelines:

	S	N.I.
The college or school's professional degree program curriculum prepares graduates with the professional competencies to enter pharmacy practice in any setting to ensure optimal medication therapy outcomes and patient safety, satisfies the educational requirements for licensure as a pharmacist, and meets the requirements of the university for the degree. Including:		
<ul style="list-style-type: none"> <li>The ability to provide patient care in cooperation with patients, prescribers, and other members of an interprofessional health-care team based upon sound therapeutic principles and evidence-based data, taking into account relevant legal, ethical, social, cultural, economic, and professional issues, emerging technologies, and evolving biomedical, pharmaceutical, social/behavioral/administrative, and clinical sciences that may impact therapeutic outcomes.</li> </ul>	●	○
<ul style="list-style-type: none"> <li>The ability to manage and use resources of the health care system, in cooperation with patients, prescribers, other health care providers, and administrative and supportive personnel, to promote health; to provide, assess, and coordinate safe, accurate, and time-sensitive medication distribution; and to improve therapeutic outcomes of medication use.</li> </ul>		
<ul style="list-style-type: none"> <li>The ability to promote health improvement, wellness, and disease prevention in cooperation with patients, communities, at-risk populations, and other members of an interprofessional team of health care providers.</li> </ul>		
The curriculum develops in graduates knowledge that meets the criteria of good science; professional skills, attitudes, and values; and the ability to integrate and apply learning to both the present practice of pharmacy and the advancement of the profession.	●	○
Graduates are able to identify and implement needed changes in pharmacy practice and health care delivery.	●	○
In developing knowledge, skills, attitudes, and values in students, the college or school ensures that the curriculum fosters the development of professional judgment and a commitment to uphold ethical standards and abide by practice regulations.	●	○
The college or school ensures that the curriculum addresses patient safety, cultural competence, health literacy, health care disparities, and competencies needed to work as a member of or on an interprofessional team.	●	○
The curriculum encompasses content, instructional processes, course delivery, and experiential education.	●	○
The college or school has addressed the guidelines for this standard.	●	○

<sup>10</sup> "Good science" implies having the following characteristics: evidence-based, logical, convincing, explanatory, honest, testable, and systematic.

2) **Describe** how the program is meeting the Standard and Guidelines. (On average, text responses for this item, combined with text responses addressing items 3 and 4 below should not exceed 4 pages (4 pages/standard X 30 standards = 120 total text pages to address items 2,3, and 4 for each standard)

In 2006, the Curricular Revision Task Force (CRTF), was formed by the Dean with the responsibility of revising the Doctor of Pharmacy curriculum to be consistent with the proposed accreditation standards and to reflect contemporary elements seen in other doctor of pharmacy curricula. In its initial step, the CRTF reviewed all outcomes of the Doctor of Pharmacy program with a final set of outcomes approved by the faculty of the College (Appendix 9.1). This was done through a methodical process that involved a complete review of the existing curriculum's outcomes, review of *Standards 2007* and Appendix B, as well as *Vision 2015*, *CAPE 2004* and the identification of additional outcomes felt to be consistent with the strengths of the College, its faculty and other stakeholders including adjunct faculty members and alumni. As the revision process continued, input was also provided by the College's team attending the 2007 AACP Institute. With this broad range of input, the CRTF identified six principal categories for course work encompassing all identified outcomes. The resultant course categories included: biomedical sciences, drug delivery, drug action, pharmacy practice management and health care delivery, and patient-centered care. Appendix B elements were then categorized based on the functional course categories providing an initial organization of subject matter. Curricular ability-based outcomes (ABOs) were then developed and organized into the following categories: Patient-specific and population-based disease management, health promotion, systems management, communication, problem-solving skills, and professionalism. Additional detail was added with the delineation of levels for specific ABO's that reflected progressive student development within the curriculum. This process created a mapping rubric consisting of course content and curricular outcomes, based on *Standards 2007* and the additional documents outlined above. Through this broad and comprehensive review of seminal documents in academic pharmacy, the scientific foundation and the applied components of pharmacy practice were identified as specific outcomes that must be achieved in the curriculum. Through this structured process, a significant revision was completed, producing a curriculum designed to meet the curricular accreditation standards in *Standards 2007*.

Coursework in P1 and P2 focuses on fundamental sciences including: biochemistry, pathophysiology of disease, pharmaceuticals, pharmacology, medicinal chemistry, and practice management. Progressively more integrative coursework is presented to students in an attempt to familiarize them with cross-discipline application of information and problem solving. To ensure development of practice skills, P1 and P2 contain a Practice Skills course sequence that establishes a foundation of skills further developed and refined in P3. P3 coursework centers on therapeutics and integrated patient case studies, pharmacy practice management, drug literature evaluation, research methodology, sociopharmacy and pharmacy law. Continuation of the Practice Skills sequence in P3 further develops students' abilities to integrate learning to patient specific cases.



Professional skills development is centered in the Practice Skills Labs sequence, P1 through P3, and introductory and advanced pharmacy practice experiences (IPPE; APPE). Practice skills labs provide both active-learning and simulation environments for students, serving as a foundation for IPPE and APPE courses. Course work in each year is structured to support the IPPE that follows, thus the IPPE serves as a ‘mile-marker’ for application of material presented in each year. The community-based IPPE following P1 emphasizes content in the areas of pharmaceuticals, non-sterile compounding and non-prescription and herbal preparations; the institutional-based IPPE following P2 emphasizes drug action, the rudiments of clinical practice, and sterile compounding/intravenous admixture labs. Longitudinal patient-based IPPE’s are integrated into P2 and P3 to provide students with early experience with chronic disease-states and their impact on patients, fostering the development of empathy as the student approaches APPE assignments.

The curricular revision process focused on development of a practitioner capable of successful practice in entry-level practice areas as the overarching goal. Thus, the curriculum is designed to build upon a progression of scientific concepts, presented with increased integration, complemented by a continuum of clinical experiences. Linkages are continually made between the scientific foundation and clinical practice through the practice skills laboratory sequence with further emphasis through application in the uniquely structured IPPE’s that include longitudinal and conventional practice experiences.

3) **Comments:** Describe a) areas of the program that are noteworthy<sup>11</sup>; b) the program’s assessment of its issues and its plans for addressing them with relevant timeframes; or c) findings that highlight areas of concern along with actions or recommendations to address them:

The recent curricular revision process represents one of the most evidence-based and deliberative processes undertaken by the College. Through the thorough review of several seminal documents, the CRTF developed a detailed battery of curricular outcomes that provided an in-depth guide to assess all components of the curriculum and allowed for detailed mapping of each course to the ABO’s developed in the initial phase of the revision process.

Results from AACP/ACPE graduate and alumni assessment surveys have been complementary of the existing Doctor of Pharmacy curriculum. With the 2000 Curriculum as a foundation, revisions made in the 2009 Curriculum directly address contemporary issues in the profession and the expanded role of experiential education in the curriculum. From the AACP/ACPE surveys, over 85% of graduates either strongly agreed or agreed (SA/A) that the curriculum prepared them to: provide patient care in accordance with legal, ethical, social, economic, and professional guidelines; manage the system of medication use to affect patients; promote wellness and disease prevention services; and work with other stakeholders (e.g., patients and other health professionals) to identify and

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<sup>11</sup> Examples of Noteworthy Areas: A) The philosophy and goal of the curriculum are written and shared with all faculty students and preceptors. B) Students from the college or school have a 100 % NAPLEX pass rate. C) Data such as employer surveys show that graduates are effective (e.g., reduce medication errors). D) Graduates have changed practice.

resolve problems related to medication use. In both 2008 and 2009, 83% of graduates SA/A that the curriculum fosters opportunities to develop professional attitudes, ethics and behaviors. Also, 88% of graduates SA/A that the Doctor of Pharmacy curriculum prepared them to identify and use risk reduction strategies to minimize medication errors. Among alumni surveyed in 2008 (which included only graduates of the Doctor of Pharmacy curriculum), 94.6% SA/A that when they were a student they knew what the program outcomes were.

Ferris State University pharmacy student scores for the standardized exams are at par for other colleges of Pharmacy in Michigan. The NAPLEX pass rate for first-time candidates from Ferris averaged 96.74% from 2005 to 2009 (see Appendix 17.7a) while MJPE pass rates averaged 95.00% from 2007 to 2009 (see Appendix 17.7b )

As outlined above, the curricular revision process followed an evidence-based approach, utilizing the initial draft of Standards 2007 and additional landmark documents to update the existing curricular outcomes of 2000 Curriculum. The process provided a detailed mapping instrument to guide the process and to serve as a touchstone to evaluate the finished curriculum. The curricular map also provided an outline for the functional course categories, identifying the five categories for course classification. Committee members were engaged throughout the process and progress was reviewed with the entire faculty through college-wide meetings as development progressed. Recognizing that the “2+4” curricular format admits students from a broad range of pre-pharmacy programs, the CRTF felt that the pre-pharmacy requirements must be established as a first step in the revision process to ensure all candidates were adequately prepared for the revised curriculum’s advanced course work. In addition, the CRTF felt it important that ample notification be provided to regional two- and four-year institutions to ensure that students could meet the revised pre-requisites.

The 2009 Curriculum considers all aspects of licensure requirements and is designed to meet future expectations of the profession. This is accomplished through an intentionally designed sequence of courses ranging from pharmaceutical sciences to the social sciences, to an expanded APPE requirement that emphasizes the development of knowledge, skills and attitudes in clinical practice. Further, the curriculum encourages innovative teaching methodologies by faculty, through the integration of course content in several areas.

4) **Quality Improvements:** Write any additional comments to further advance the quality of the program:

5) **Final Evaluation:** Using your best professional judgment, evaluate how well the program meets the standard by putting a check in the appropriate box :

Meets the Standard	Partially Meets the Standard	Does Not Meet the Standard
<ul style="list-style-type: none"> <li>• Faculty are able to discuss the goal and philosophy of the curriculum</li> <li>• NAPLEX Pass rates are not lower than 2 standard deviations below the national mean.</li> <li>• Graduates work in all areas of the profession (e.g. not all in hospitals or community settings).</li> </ul>	<ul style="list-style-type: none"> <li>• The goal of the curriculum is poorly communicated or understood among the faculty and administration (e.g., the dean and department heads, know about it, but not the faculty).</li> <li>• Graduates are directed toward one particular practice (e.g. community pharmacy) to the exclusion of others.</li> <li>• NAPLEX scores are significantly inconsistent from year to year.</li> <li>• The college or school has a plan and is in the process of addressing all issues related to not meeting the requirements of this standard.</li> </ul>	<ul style="list-style-type: none"> <li>• NAPLEX scores of students are 2 or more standard deviations below the national mean (refer to ACPE policy).</li> <li>• Graduates have difficulty securing employment of choice or suffer from low employment rates.</li> <li>• Students do not exhibit professional attitudes, values and behaviors.</li> <li>• Employers or state boards of pharmacy indicate that students are unprepared for practice.</li> </ul>
<input checked="" type="checkbox"/> <b>Meets the Standard</b>	<input type="checkbox"/> <b>Partially Meets the Standard</b>	<input type="checkbox"/> <b>Does Not Meet the Standard</b>

**Standard No. 10: Curricular Development, Delivery, and Improvement:** The college or school's faculty must be responsible for the development, organization, delivery, and improvement of the curriculum. The curriculum must define the expected outcomes and be developed, with attention to sequencing and integration of content and the selection of teaching and learning methods and assessments. All curricular pathways must have both required and elective courses and experiences and must effectively facilitate student development and achievement of the professional competencies.

The curriculum for the professional portion of the degree program must be a minimum of four academic years or the equivalent number of hours or credits. The curriculum must include didactic course work to provide the desired scientific foundation, introductory pharmacy practice experiences (not less than 5% of the curricular length) and advanced pharmacy practice experiences (not less than 25% of the curricular length).<sup>12</sup>

1) Use the checklist below to rate the program on the requirements of the standard and accompanying guidelines:

	S	N.I.
The college or school's faculty is responsible for the development, organization, delivery, and improvement of the curriculum.	●	○
The curriculum defines the expected outcomes and is developed with attention to sequencing and integration of content and the selection of teaching and learning methods and assessments.	●	○
All curricular pathways have both <i>required</i> and <i>elective</i> courses and experiences and effectively facilitate student development and achievement of the professional competencies.	●	○
The curriculum for the professional portion of the degree program is a minimum of four academic years or the equivalent number of hours or credits.	●	○
The didactic course work provides the desired scientific foundation.	●	○
Introductory pharmacy practice experiences are not less than 5% of the curricular length (i.e., 300 hours).	●	○
The advanced pharmacy practice experiences are not less than 25% of the curricular length (i.e., 1440 hours).	●	○
On behalf of the faculty, the Curriculum Committee (or equivalent) manages curricular development, evaluation, and improvement to ensure that the curriculum is consistent with the collective vision of the faculty and administration.	●	○
The curriculum complies with university policies and procedures and the accreditation standards.	●	○
Student representation and feedback are integral parts of curricular development and improvement.	●	○
The Curriculum Committee (or equivalent) has adequate resources to serve as the central body for the management of orderly and systematic reviews of curricular structure, content, process, and outcomes, based on assessment data.	●	○
The college or school has addressed the guidelines for this standard.	●	○

<sup>12</sup> Refer to Standards 13 and 14 and Appendices B and C for additional detail and guidance.

2) **Describe** how the program is meeting the Standard and Guidelines. (On average, text responses for this item, combined with text responses addressing items 3 and 4 below should not exceed 4 pages (4 pages/standard X 30 standards = 120 total text pages to address items 2,3, and 4 for each standard)

The Curriculum Committee is composed of three faculty representatives from Pharmacy Practice, three faculty representatives from Pharmaceutical Sciences, one administrative representative, one alumnus, and two non-voting student representatives. The College representative to the University Curriculum Committee (UCC) is an ex-officio member if he/she is not a department representative. The staggered term length for faculty is three years. All curriculum proposals must be approved by the College Curriculum Committee, the full faculty, and the Dean before they can be forwarded to the UCC (see Appendix 10.1). The Curriculum Committee is responsible for reviewing the curriculum and outcomes assessment (with direction from the Assessment Committee), providing direction for needed course changes, and bringing recommended curriculum revisions to the faculty for approval. Course changes at the college-level are reviewed and approved by the UCC and must include the course name/number, catalog description, learning outcomes, assessment methods, and content outline by hours. Once approved by the UCC, they are also reviewed and approved by the Academic Senate and the Office of Academic Affairs. These later steps insure that the curricula of each college meet University standards and policies, and general education requirements. Because of the comprehensive scope of the curricular revision, the CRTF was formed by the Dean and began its deliberations in June, 2006. The CRTF was comprised of faculty representatives from each department, administrative appointees, an alumnus and a student. Regular reports were given to the College's Curriculum Committee along with the final recommendations. All curricular changes followed the process above.

The revision of the curriculum was completed in three phases. In the first phase, the *pre-pharmacy* courses were reviewed, modified and implemented (Senate approved 3/07). This was done to allow these changes to be disseminated with the possibility of a two-year window for pre-pharmacy students. In the second phase, the *required* professional courses were reviewed, updated and approved (Senate approved 12/08). In the third phase, the *elective* courses were reviewed and approved. The committee has approved a number of elective courses to date (Senate approved 10/09) and is in the process of reviewing additional didactic and experiential electives.

The 2009 Curriculum was designed to meet all accreditation standards including a minimum of four academic years, didactic course work to provide the desired scientific foundation, and required time for introductory and advanced pharmacy practice experiences (see Appendix 10.2). Stakeholder feedback was solicited at the beginning of the process from the Pharmacy Alumni Board and National Advisory Board. The College faculty members were also given an opportunity to provide suggestions in a period of open comment at the beginning of the process. Course competencies were developed from the ability-based outcomes, which were reviewed and approved by the faculty (See Appendix 9.1), as well as Vision 2015 and CAPE 2004. Introductory pharmacy

practice experiences (IPPE's) occur during the summers after P1 and P2, along with longitudinal experiences during the P2 and P3 years. These were designed to provide approximately 300 contact hours. The accelerator program, available in the 2000 curriculum, was discontinued to accommodate a redistribution of the early experiential hours. An APPE in hospital/health-system pharmacy was added to the P4 year. Elective credits are spread over the curriculum to include two credits in P2, two credits in P3, and twelve credits (three APPE) in P4 (see Appendix 10.3).

Throughout the revision, courses were mapped against the ABOs and *ACPE Accreditation Standards*, Appendix B elements. Mapping identified deficiencies in the 2000 Curriculum to be addressed in the 2009 curricular revision and assisted in the sequencing of coursework based on the level of the outcome. The CRTF identified five functional course categories, which served as the basis for curricular design: biomedical sciences (medical/molecular biochemistry and biotechnology), drug delivery (pharmaceutics and pharmacokinetics), drug action (pharmacology and medicinal chemistry), pharmacy practice management and health care delivery (practice management, pharmacoeconomics, sociopharmacy and pharmacy law), and patient-centered care (therapeutics, clinical communications, drug literature evaluation and research methods).

The Curriculum Committee also monitors the ongoing delivery of the curriculum utilizing student content evaluations. These evaluations are conducted on a regular rotating basis. The students are given a copy of the approved course content and asked: A) if the material was covered through lecture, assigned readings or use of other media, B) if there was additional material presented beyond that listed in the course outline, and C) if examinations were consistent with the topics presented through lecture, assigned readings or other instructional methods. If the students indicate there was a discrepancy, the faculty member responsible for teaching or coordinating the course is asked to explain the discrepancy to the Curriculum Committee. The students are also asked if topics were unnecessarily duplicated between courses during the semester and if topics were reasonably coordinated between courses during the semester. Content evaluations for the 2000 Curriculum were suspended with the approval of the 2009 Curriculum and were again implemented with the 2009 Curriculum in Fall, 2009. This will be discussed further in Standard 12.

Students also provide feedback to faculty with the Student Assessment of Instruction (SAI) form (see Appendix 10.4). This feedback addresses course expectations, organization and delivery of the content, grading and faculty-student interaction. The results of an SAI are to be used for faculty improvement and are available only to the individual faculty member, the Department Chair and the Dean. Some courses, especially those team taught, use course-specific evaluations to provide feedback to each faculty member.

Administrative support for the Curriculum Committee is provided by the Dean's office staff. In addition, the Assistant Dean of Student Affairs and Assessment, in conjunction with the Assessment Committee and the office staff, provide support to the assessment activities of the Curriculum Committee.

**3) Comments:** Describe a) areas of the program that are noteworthy<sup>13</sup>; b) the program's assessment of its issues and its plans for addressing them with relevant timeframes; or c) findings that highlight areas of concern along with actions or recommendations to address them:

The 2009 Curriculum revision has addressed the deficiencies in the previous curriculum. *In the 2009 Faculty Survey*, 95.2% of faculty agreed the organization and structure of the curriculum is clear; 90.4% SA/A they understood how their instructional content fits into the curriculum; and 80.9% SA/A that the curriculum is taught at a depth that supports understanding of central concepts and principles. There is improved agreement that the curriculum is consistent with the collective vision of the faculty and administration (change from 60% agreement in 2007 survey to 76.1% in 2009 survey) and that faculty members are consulted in curriculum matters (95.2% agreement in 2009 survey). There is increased agreement that curricular collaboration is being encouraged (change from 30% agreement in 2007 to 71.4% agreement in 2009 survey). One of the goals of the revised curriculum is to increase integration between disciplines. This is evidenced by the development of the Drug Action sequence (integrating pharmacology and medicinal chemistry), and the Infectious Disease sequence (integrating microbiology, medicinal chemistry and therapeutics). Both of these course sequences are offered in P2 and are in the final stages of development for delivery in the Fall, 2010 semester. This collaborative effort extends backward to P1 with the pathophysiology and biochemistry content areas to ensure students have the background expected and forward to P3 for collaboration with the therapeutics faculty.

In the most recent AACCP survey, 72.4% of graduates SA/A that the sequence of courses was appropriate (up from 63.7% in 2008); and 77.5% of graduates SA/A that course loads were reasonable (down from 84.9% in 2008).

**4) Quality Improvements:** Write any additional comments to further advance the quality of the program:

The graduate surveys reflect opportunities for improvement with the pharmacy-related electives meeting student needs (55.7% SA/A in 2008 and 74.1% SA/A in 2009). In the 2000 Curriculum, students had two electives in P2 and one in P3 (electives were two credits each). The electives in P2 were offered across all three semesters due to the accelerator program. With a smaller number of faculty members at the Big Rapids campus, there were frequently only a few extra seats available compared to the number of students that needed electives. In addition, course caps had to be modified to accommodate student numbers, resulting in some changes in teaching methods utilized. Student preference lists combined with a lottery system were used to determine student assignments to

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<sup>13</sup> Examples of Noteworthy Areas: The curriculum committee meets regularly, and uses assessment data for curricular refinement.

classes. The change in elective credits to two credits in P2 and two credits in P3 should partially alleviate this problem. In addition, beginning with the class entering in Fall 2009, students self-schedule most of their required and elective courses.

The College has recently consolidated its assessment activities utilizing the TracDat system. This system allows for integration of the AACCP surveys, content evaluations, curricular and programmatic assessment and portfolio information into a single database. Information regarding the assessment of curriculum is outlined in Standards 12 and 15.

5) **Final Evaluation:** Using your best professional judgment, evaluate how well the program meets the standard by putting a check in the appropriate box :

Meets the Standard	Partially Meets the Standard	Does Not Meet the Standard
<ul style="list-style-type: none"> <li>• The curriculum committee is an agent for improvement that is broadly composed of faculty members and students.</li> <li>• The curriculum committee evaluates and approves all courses and oversees the sequencing and integration of course content.</li> <li>• The curriculum committee's reviews are proactive, recurrent, and systematic.</li> <li>• The faculty as a whole is engaged in committee processes through discussion and voting.</li> <li>• Introductory-practice experiences are not less than 5% of total credit during the didactic component and include exposure to community and institutional settings.</li> <li>• Advanced-practice experiences are not less than 25% of total credit, and occur after the didactic component is complete.</li> <li>• Preparation and reflection periods are included in the syllabus for early and advanced practice experiences.</li> <li>• The curriculum has elective as well as required courses.</li> </ul>	<ul style="list-style-type: none"> <li>• Preparation or reflection periods are missing from either early or advanced-practice experiences, but not both.</li> <li>• The curriculum committee exists, but it is not representative of the faculty.</li> <li>• The curriculum committee has no mechanism for proactive, recurrent, and systematic reviews.</li> <li>• Introductory practice experiences are all in one setting.</li> <li>• The college or school has a plan and is in the process of addressing all issues related to not meeting the requirements of this standard.</li> </ul>	<ul style="list-style-type: none"> <li>• No preparation and reflection periods are included in the syllabus for early and advanced practice experiences.</li> <li>• The college or school has no curriculum committee or it is ineffective.</li> <li>• Introductory-practice experiences are nonexistent or less than 5% of total credit during the didactic component.</li> <li>• Advanced-practice experiences are less than 25% of total credit.</li> <li>• The curriculum has few elective courses, or poor scheduling practices effectively make it impossible for many students to take desired electives.</li> </ul>
<input checked="" type="checkbox"/> <b>Meets the Standard</b>	<input type="checkbox"/> <b>Partially Meets the Standard</b>	<input type="checkbox"/> <b>Does Not Meet the Standard</b>



**Standard No. 11: Teaching and Learning Methods:** The college or school, throughout the curriculum and in all program pathways, must use and integrate teaching and learning methods that have been shown through curricular assessments to produce graduates who become competent pharmacists by ensuring the achievement of the stated outcomes, fostering the development and maturation of critical thinking and problem-solving skills, meeting the diverse learning needs of students, and enabling students to transition from dependent to active, self-directed, lifelong learners.

1) Use the checklist below to rate the program on the requirements of the standard and accompanying guidelines:

	S	N.I.
The college or school, throughout the curriculum and in all program pathways, uses and integrates teaching and learning methods that have been shown through curricular assessments to produce graduates who become competent pharmacists by ensuring the achievement of the stated outcomes, fostering the development and maturation of critical thinking and problem-solving skills, meeting the diverse learning needs of students, and enabling students to transition from dependent to active, self-directed, lifelong learners.	<input checked="" type="radio"/>	<input type="radio"/>
The college or school evaluates the effectiveness of its curricular innovations through its assessment activities.	<input type="radio"/>	<input checked="" type="radio"/>
The outcomes of the distance-learning activities are appropriate for the student population and achievable through distance study. <div style="text-align: right;">N/A <input type="checkbox"/></div>	<input checked="" type="radio"/>	<input type="radio"/>
The college or school has addressed the guidelines for this standard.	<input checked="" type="radio"/>	<input type="radio"/>

2) **Describe** how the program is meeting the Standard and Guidelines. *(On average, text responses for this item, combined with text responses addressing items 3 and 4 below should not exceed 4 pages (4 pages/standard X 30 standards = 120 total text pages to address items 2,3, and 4 for each standard)*

The College included a practice skills lab in each semester of P1, P2 and P3, in both the 2000 and 2009 Curricula. The labs are intended to help develop fundamental practice skills, integrate discipline-specific coursework into patient care planning, and provide a setting for students to be exposed to patient simulations. Examples include: pharmaceutical compounding exercises, hands-on demonstrations, prescription simulations, case presentations, games, peer evaluation, and many other methods to actively involve the students in their learning across the curriculum.

A number of different pedagogical methods are being utilized as a component of classroom instruction in the College, in addition to traditional lecture. This includes case-based teaching, problem-based learning, game simulation, audience response system (“Clickers”), video patient case presentations, poster presentations, simulations, and self-directed learning (see examples in Appendices 11.1 and 11.2). There are also a number of technology applications utilized by the University and the College to assist in the delivery of course content and student assessment. The University currently employs Blackboard online course management system. Blackboard is utilized in varying degrees by faculty to enhance student communication through e-mail and online class discussion, dissemination of course/exam grades, content/learning module delivery, identification of course goals and objectives, and online assessment. The University has also invested in the Tegrity system, which allows faculty to record classroom presentations with automatic upload to Blackboard. The Tegrity system provides students with asynchronous access to course material, including faculty-recorded supplemental materials.

Critical thinking and problem-solving skills are addressed in a number of ways in the classroom. Throughout the College, there is increasing development of, and emphasis on, the formation and application of problem-solving skills culminating in the advanced pharmacy practice experiences (APPE). Progressively more complex prescription simulations are used on a regular basis in Practice Skills Lab in P1 and P2 along with Clinical Communications. In P3 students are presented with relatively simple pharmacotherapy cases and required to identify problems and solutions from a pharmacy perspective. As the students progress through the year, the cases become more complex to continue the students’ development in clinical problem solving. In the 2009 Curriculum the P3 Integrated Case Studies course is designed to integrate material from the first three years of the curriculum, in a format designed to best prepare students for P4. This course will assess patient therapeutic planning, monitoring, communication, and drug literature skills. The APPEs will challenge students with real-life clinical problems for which they must find solutions under the supervision of an experienced preceptor.

Over the past several years, there has been formalization of opportunities for students to develop and apply self-directed learning. In the P3 Pharmacotherapeutics course, student-directed learning modules (SDL) have been

included on a weekly basis. In the SDLs, students were given a range of learning materials for which they were responsible to review on their own time to master specific material. The SDL's included components of self-assessment and opportunity to meet with the SDL instructor/developer for clarification of any questions about the material. Based on review of the students' use of these modules, there have been recent revisions to this process including a name change to Independent Study Modules (ISM).

In the Pharmacotherapeutics courses, student integration of basic and clinical sciences is assessed. Bi-weekly exams are required, each of which must be successfully completed in order to progress through the course. In addition, the student must successfully complete the capstone final exam with a satisfactory minimum score in order to progress. In the event a student does not achieve a passing score on the biweekly exams or the final exam, remediation exams are in place offering the student an incentive to review and learn the material and another opportunity to pass the specific section or final exam.

The Pharmacotherapeutics course sequence is delivered by synchronous distance-learning between Grand Rapids and Kalamazoo. A variety of creative methods such as case discussions are employed to engage students at both sites to achieve the outcomes of the courses. Student course evaluations and student focus groups conducted by the course coordinators have indicated that, in general, students feel that the distance technology, while not perfect, is a suitable approach to deliver the course content. Ongoing examination of student course outcomes between Grand Rapids and Kalamazoo indicate that achievement of outcomes is equal in the two locations. In addition, technology has been updated on an annual basis with replacement when warranted.

The College formally established a Professional Development Committee in 2007 to improve the coordination of College-wide faculty development. There is widespread encouragement from administrators and peers to transition from traditional lecture-based formats to more active teaching methods across the curriculum. In addition to College-based professional development opportunities, the University's Faculty Center for Teaching and Learning (FCTL) is available to all faculty. The FCTL supports faculty in continuous improvement of their teaching through numerous opportunities on a broad range of teaching topics throughout the year. Many, if not most, of the sessions sponsored by the FCTL promote the use of active learning techniques and enhanced use of technology in the classroom, providing the faculty with many examples of diverse active teaching methods and technology advances. Evidence of the College's faculty's efforts in active learning comes from the *2008* and *2009 Graduate Surveys*. In the surveys, 87% (2008) and 90% (2009) of respondents SA/A that they were provided the opportunity to engage in active learning.

With the entering class of 2009, the College implemented the use of a student assessment portfolio. The portfolio project is intended to determine the types of assessments and activities which would be best supported through this medium. Due to the expense associated with a separate turnkey portfolio system, the College began

this project using the existing Blackboard system. Activities related to the portfolio began in P1 with two reflective writing assignments (entrance to the College of Pharmacy; and key characteristics of a health care professional), and a mock patient counseling assignment (see Appendix 11.3). Students also conducted a self assessment of ability-based outcomes as part of the portfolio. Finally, curricular content evaluations for P1 were conducted utilizing the portfolio system. A complete review of curricular assessment activities, along with more information on the portfolio, is detailed in Standard 15.

**3) Comments:** Describe a) areas of the program that are noteworthy<sup>14</sup>; b) the program's assessment of its issues and its plans for addressing them with relevant timeframes; or c) findings that highlight areas of concern along with actions or recommendations to address them:

The College has fostered an environment in which teaching innovation is supported and encouraged. Several faculty members have experimented with different teaching methods in many different courses. Some have employed games which challenge the students to compete with one another in a collegial fashion, motivating some students to put forth greater effort than in a less active and competitive environment. Other faculty use group participation exercises, examples or demonstrations, practice quizzes, out-of-class projects, or recitations to actively engage students. Faculty members evaluate these innovative activities through student feedback in order to obtain students' perceptions of the value and acceptability of these teaching methods. Those methods that are found to support achievement of course goals and objectives are continued; while those that do not are replaced by other methods.

Evidence for support of self-directed learning comes from surveys of the faculty, alumni, graduates, and preceptors. In the *2007 Faculty Survey*, 100% of the faculty indicated that they encourage their own students to assume responsibility for their learning. In the *2009 Faculty Survey*, 81% of the faculty SA/A that they encourage students to assume responsibility for their own learning. In the *2008 Alumni Survey*, 96% of respondents SA/A that they were encouraged to assume responsibility for their learning. In the *2008 and 2009 Graduate Surveys*, 89% and 83% of respondents respectively SA/A that they develop the skills needed for continued learning after graduation. Finally, in the *2007 Preceptor Survey*, 93.2% of respondents SA/A that students were willing to assume responsibility for their own learning at the preceptors' sites.

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<sup>14</sup> Examples of Noteworthy Areas: A) The curriculum is highly learner centered, using diverse methods such as active learning, case studies and simulations. B) Education experts are consulted or directly involved in developing teaching and learning activities. C) Portfolios are actively used to give students feedback and shape their learning (e.g., comments are written in portfolios). D) Mechanisms exist for sharing student information before rotations to enable preceptors to tailor instruction to address the learning needs of students (e.g., preceptors meet before each year to talk about students).

4) **Quality Improvements:** Write any additional comments to further advance the quality of the program:

The College has continued to invest in the distance technology utilized for delivery of content on the Grand Rapids and Kalamazoo campuses. Since the last accreditation visit, all of the hardware and software has been replaced. In addition, the technology has been updated on an annual basis. Exam scores for distance courses are compared between the two sites and no significant difference has been found in outcomes between the two sites. Parity between the two sites is also demonstrated by the similarity in NAPLEX scores between students who participated in coursework at these two sites.

Faculty development activities have become more structured and coordinated under the direction of the College Professional Development Committee formed in 2007. Different programs and tracks have been developed to assist new, as well as tenured, faculty in teaching techniques, research and grant pursuit and tenure and promotion development.

5) **Final Evaluation:** Using your best professional judgment, evaluate how well the program meets the standard by putting a check in the appropriate box :

Meets the Standard	Partially Meets the Standard	Does Not Meet the Standard
<ul style="list-style-type: none"> <li>• Faculty members use a variety of teaching-and-learning techniques (e.g., active learning, case studies, etc.).</li> <li>• Results from capstone exams are used to assess and remediate individual student learning as well as to assess the effectiveness of the curriculum.</li> <li>• A process is used throughout the curriculum to document that students are applying knowledge and skills.</li> <li>• Preceptors tailor instruction to meet the needs of the student by challenging strengths and remediating weaknesses.</li> <li>• Students are supported to become self-directed, lifelong learners.</li> </ul>	<ul style="list-style-type: none"> <li>• A process is used in the curriculum to document knowledge, but not application and skills.</li> <li>• Faculty are participating in structured development activities in order to move from a lecture-based curriculum to one that uses a variety of teaching-and-learning techniques.</li> <li>• The college or school has a plan and is in the process of addressing all issues related to not meeting the requirements of this standard.</li> </ul>	<ul style="list-style-type: none"> <li>• Lecture is the primary mode of instruction.</li> <li>• No process is used to document that students are applying knowledge and skills.</li> <li>• The college or school has no evidence of assessing and evaluating teaching methodologies.</li> <li>• Students are dependent learners and lack critical-thinking and problem-solving skills.</li> <li>• The college or school has no strategies or systems to support the needs of diverse learners.</li> </ul>
<input checked="" type="checkbox"/> <b>Meets the Standard</b>	<input type="checkbox"/> <b>Partially Meets the Standard</b>	<input type="checkbox"/> <b>Does Not Meet the Standard</b>

**Standard No. 12: Professional Competencies and Outcome Expectations:** Professional pharmacist competencies that must be achieved by graduates through the professional degree program curriculum are the ability to:

1. Provide patient care in cooperation with patients, prescribers, and other members of an interprofessional health care team based upon sound therapeutic principles and evidence-based data, taking into account relevant legal, ethical, social, cultural, economic, and professional issues, emerging technologies, and evolving biomedical, pharmaceutical, social/behavioral/administrative, and clinical sciences that may impact therapeutic outcomes.
2. Manage and use resources of the health care system, in cooperation with patients, prescribers, other health care providers, and administrative and supportive personnel, to promote health; to provide, assess, and coordinate safe, accurate, and time-sensitive medication distribution; and to improve therapeutic outcomes of medication use.
3. Promote health improvement, wellness, and disease prevention in cooperation with patients, communities, at-risk populations, and other members of an interprofessional team of health care providers.

These professional competencies must be used to guide the development of stated student learning outcome expectations for the curriculum. To anticipate future professional competencies, outcome statements must incorporate the development of the skills necessary to become self-directed lifelong learners.

1) Use the checklist below to rate the program on the requirements of the standard and accompanying guidelines:

	S	N.I.
Professional Competencies 1, 2 and 3 guide the development of stated student learning outcome expectations for the curriculum.	<input checked="" type="radio"/>	<input type="radio"/>
Graduates are able to provide patient care in cooperation with patients, prescribers, and other members of an interprofessional health-care team based upon sound therapeutic principles and evidence-based data, taking into account relevant legal, ethical, social, cultural, economic, and professional issues, emerging technologies, and evolving biomedical, pharmaceutical, social/behavioral/administrative, and clinical sciences that may impact therapeutic outcomes.	<input checked="" type="radio"/>	<input type="radio"/>
Graduates are able to manage and use resources of the health care system, in cooperation with patients, prescribers, other health care providers, and administrative and supportive personnel, to promote health; to provide, assess, and coordinate safe, accurate, and time-sensitive medication distribution; and to improve therapeutic outcomes of medication use.	<input checked="" type="radio"/>	<input type="radio"/>
Graduates are able to promote health improvement, wellness, and disease prevention in cooperation with patients, communities, at-risk populations, and other members of an interprofessional team of health care providers.	<input checked="" type="radio"/>	<input type="radio"/>
Outcome statements include developing skills to become self-directed lifelong learners.	<input checked="" type="radio"/>	<input type="radio"/>
Graduates possess basic knowledge, skills, attitudes, and values to practice pharmacy independently by graduation.	<input checked="" type="radio"/>	<input type="radio"/>
The college or school has addressed the guidelines for this standard.	<input checked="" type="radio"/>	<input type="radio"/>

2) **Describe** how the program is meeting the Standard and Guidelines. (On average, text responses for this item, combined with text responses addressing items 3 and 4 below should not exceed 4 pages (4 pages/standard X 30 standards = 120 total text pages to address items 2,3, and 4 for each standard)

Development of the curricular Ability Based Outcomes (ABOs) was the initial step in the curricular revision process. ABOs developed for the 2000 Curriculum served as a starting point for the 2009 Curricular revision with several landmark documents, including Standards 2007 Appendix B, extensively reviewed and incorporated into the final 2009 Curricular ABOs (See Appendix 9.1). The resultant ABOs represent an expansion of the Appendix B, with three additional categories added including: Communication (*The student shall read, write, speak, listen, use data, media and computers to communicate effectively with various audiences for a variety of purposes*); Problem Solving (*The student shall find and analyze information and shall make informed, rational, and ethical decisions*); and Professionalism (*The student shall articulate the influences of values on ideas and actions and shall demonstrate the ability and inclination to take responsibility for ethical conduct in personal and professional settings. The student shall demonstrate the ability and inclination to learn on one's own, to pursue new knowledge, to self-assess, to respond appropriately to assessment by others, and to modify one's ideas in light of new discoveries.*) The six categories of ABOs guided the development of each course and the curriculum overall. In each category, three levels of performance are described with supporting, detailed, outcomes listed; over 200 descriptions of outcomes are identified in the ABO document. This document served to guide the development of the curriculum, as it represented a single, comprehensive listing of all ABOs considered by the CRTF as essential in the new curriculum.

Application of the ABOs to the curriculum was further refined with three categories of performance described – introduction, mastery and reinforcement. This in-depth level of curricular mapping – courses cross-referenced to *tiered* ABOs - provides a complete framework from which to assess the curriculum and an opportunity to deploy a variety of assessment techniques including student self-assessment coupled with TracDat (see Appendix 12.1). During the 2009-2010 academic year, as part of the College assessment plan, annual student self-assessment of curricular ABOs was begun. This process was implemented for P1, P2 and P3 students, recognizing that some dissonance was to be expected as P2 and P3 students were enrolled in the 2000 Curriculum that utilized an earlier version of curricular ABOs. ABOs were identified, based on the mapping document, with students asked to respond (Strongly Agree/Agree/Disagree/Strongly Disagree) to a descriptive statement such as: rank your ability to: *“identify the basic concepts of health promotion including determinants of health, factors contributing to health promotion, and factors influencing the use of health services.”* This self-assessment was carried out among P1 students (utilizing the newly implemented electronic portfolio discussed in Standards 11 and 15) in 2009-2010 for assigned ABOs with resultant data loaded into the TracDat system. Similarly, P2 and P3 students were asked to participate

in self-assessment of ABOs, based on those assigned to their respective professional years. This was conducted in a variety of courses, primarily the Practice Skills Lab/Integrated Lab sequence. Data from P2 and P3 students was also entered into the TracDat system for compilation (see Appendix 12.2). For all criteria, two-thirds of respondents must strongly agree or agree with the descriptor to meet the criterion.

Evaluation of the 2009-2010 data is instructive for refinement of the 2009 Curriculum (P1 respondents) and P2 and P3 responses (2000 Curriculum) will serve as a valuable comparator as the new curriculum is deployed. In the initial year of the 2009 Curriculum, P1 students were asked to self-assess their skills in 39 ABOs primarily classified as level 1 outcomes. These included outcomes in Communication, Health Promotion, Patient-specific and Population-based Disease Management, and Systems Management. In 37 of 39 outcomes students SA/A that they had achieved the competency assessed. In P2 (2000 Curriculum), competency in 70 outcome areas was self-assessed by students. In sixty of the outcomes, two-thirds or more of students responding SA/A that they were able to demonstrate competency. Areas of deficiencies were noted in medicinal chemistry, special populations, documentation of care, indigent patient care program, and target disease prevention programs. Improvement in each of these areas is anticipated with the 2009 Curriculum as P2 is implemented in 2010-2011. In P3 (2000 Curriculum), 53 outcomes were self-assessed by students with seven outcomes not meeting the specified criteria. Recognized areas of deficiency include biochemistry, medicinal chemistry, informatics, business contract law, and drug utilization review. As outlined in Standard 10, the Assessment Committee will be referring these findings to course instructors to modify course content with follow-up assessment in the following year. In academic year 2011-2012, continued implementation of the 2009 Curriculum will modify courses and course content to better align with the ABOs developed for the 2009 Curriculum.

By design, the 2009 Curriculum directly addresses the criteria outlined in Standards 2007 and Appendix B. Student self-assessment of achievement of selected curricular ABOs indicates successful implementation of the P1 year. The variances reported by the student assessment of ABOs for P2 and P3 students is expected as ABOs identified were developed for the 2009 Curriculum; however, assessments from the P2 and P3 years do not indicate a general failure of ABO achievement, but rather identify courses for modification and serve as a baseline for comparison as implementation of the new curriculum continues.



- 3) **Comments:** Describe a) areas of the program that are noteworthy<sup>15</sup>; b) the program's assessment of its issues and its plans for addressing them with relevant timeframes; or c) findings that highlight areas of concern along with actions or recommendations to address them:

*AACP/ACPE Graduate and Alumni Surveys* indicate high percentages SA/A that the Doctor of Pharmacy program developed competencies as outlined in the 2000 Curriculum outcomes. Graduate survey examples include: 94.9% SA/A that they were prepared to “*practice in interprofessional and collaborative practice setting*;” 82.8% SA/A that they developed the skills needed to “*prepare me for continued learning after graduation*;” and 89.6% SA/A that they had “*opportunities to engage in active learning*.” Collectively, 80 to 95% of graduates SA/A that they have the competencies needed for managing patient care. Overall, 84.4% of graduates SA/A that they were prepared to enter pharmacy practice. These results reflect the 2000 Curriculum content; AACP/ACPE survey data is not available for the 2009 Curriculum. However, student self-assessment of ABOs indicates broad achievement of level 1 ABOs in P1 (2009 Curriculum) and level 2 and level 3 ABOs in P2 and P3. This internal assessment data, coupled with the AACP/ACPE survey data, provides the College with a “wide-angle” view of curricular outcomes during the transition from the 2000 to the 2009 Curriculum. Results confirm that the initial development of tiered ABOs based on the *Standards 2007* and the fastidious process employed by the CRTF to ensure all ABOs were covered in the 2009 Curriculum has resulted in a revised curriculum that meets applicable standards.

In addition to achievement of ABOs within the curriculum, students are increasingly exposed to pedagogical methodologies to assist in the transition from dependent to independent learning. Notably, this has occurred in the Pharmacokinetics course in P2 and the Pharmacotherapeutics course in P3. By changing the focus away from faculty-directed learning and toward increased student responsibility for their own learning, this lifelong skill is being developed. Faculty members continue to receive support for innovation and experimentation in the classroom to improve self-directed learning skills. The P4 practical experiences allow students to develop their skills through extensive interactions with patients and other health care providers. These opportunities are a vital component of meeting the competencies set forth in the College's outcomes.

- 4) **Quality Improvements:** Write any additional comments to further advance the quality of the program:

In the most recent surveys of faculty, graduates and alumni, there were a few areas where disagree or strongly disagree responses were noticeably higher. These include: develop disease management programs (2009 faculty 28.6%, 2008 alumni 23.2%), health promotion and disease prevention (alumni 21.4%), document pharmaceutical care activities (2009 graduate 24.2%), interpreting epidemiology data relevant to

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<sup>15</sup> Examples of Noteworthy Areas: An up-to-date, dynamic curricular map guides all educational activities.

specific disease (2009 graduate 24.1%), and interpreting economic data relevant to treatment of disease (2009 graduate 24.1%). These responses suggest areas where the College can improve didactic and practical instruction.

5) **Final Evaluation:** Using your best professional judgment, evaluate how well the program meets the standard by putting a check in the appropriate box :

Meets the Standard	Partially Meets the Standard	Does Not Meet the Standard
<ul style="list-style-type: none"> <li>• Faculty have written and adopted a set of competencies and outcomes and are conversant about them.</li> <li>• The curriculum is built on the competencies which are linked to courses through the curricular map.</li> </ul>	<ul style="list-style-type: none"> <li>• Faculty are in the process of developing competencies and outcomes and there is a high likelihood that they will be adopted.</li> <li>• The faculty are in the process of curricular mapping.</li> </ul>	<ul style="list-style-type: none"> <li>• The program does not use a curricular map or equivalent.</li> <li>• The program has no stated competencies.</li> <li>• The college or school's educational outcomes or competencies are not aligned with those required by the standards.</li> </ul>
<input checked="" type="checkbox"/> <b>Meets the Standard</b>	<input type="checkbox"/> <b>Partially Meets the Standard</b>	<input type="checkbox"/> <b>Does Not Meet the Standard</b>

**Standard No. 13: Curricular Core—Knowledge, Skills, Attitudes, and Values:** To provide the thorough scientific foundation necessary for achievement of the professional competencies, the curriculum of the professional degree program must contain the following:

- biomedical sciences
- pharmaceutical sciences
- social/behavioral/administrative sciences
- clinical sciences

Knowledge, practice skills, and professional attitudes and values must be integrated and applied, reinforced, and advanced throughout the curriculum, including the pharmacy practice experiences.

1) Use the checklist below to rate the program on the requirements of the standard and accompanying guidelines:

	S	N.I.
The curriculum contains the necessary elements within the following areas as outlined in Appendix B of the Standards:		
• biomedical sciences	●	○
• pharmaceutical sciences	●	○
• social/behavioral/administrative sciences	●	○
• clinical sciences	●	○
Knowledge, practice skills, and professional attitudes and values are integrated and applied, reinforced, and advanced throughout the curriculum, including the pharmacy practice experiences.	●	○
The biomedical, pharmaceutical, social/behavioral/administrative, and clinical sciences are of adequate depth, scope, timeliness, quality, sequence, and emphasis to provide the foundation and support for the intellectual and clinical objectives of the professional degree program.	●	○
The sciences provide the basis for understanding the development and use of medications and other therapies for the treatment and prevention of disease.	●	○
Where instruction is provided by academic units of the university other than the pharmacy program, these areas are developed in accordance with the professional degree program's curricular goals and objectives; and assessment liaison mechanisms ensure effective instructional delivery and achievement of the educational objectives of the program.	●	○
N/A (no outside instruction) <input type="checkbox"/>		
The college or school has addressed the guidelines for this standard.	●	○

2) **Describe** how the program is meeting the Standard and Guidelines. *(On average, text responses for this item, combined with text responses addressing items 3 and 4 below should not exceed 4 pages (4 pages/standard X 30 standards = 120 total text pages to address items 2,3, and 4 for each standard))*

As outlined in Standard 9, the College’s CRTF was charged by the Dean in 2006 to develop a new curriculum for the College that met Standards 2007, incorporated elements of other curricula that were appropriate for the College and addressed concerns noted in the January 2005 Accreditation and Action Recommendations. Further, credits in both the pre-pharmacy and pharmacy coursework were to remain unchanged. To address all of these issues, the CRTF revised the ABOs that were developed for the 2000 Curriculum, organizing them into six categories: Patient-specific and population-based disease management, health promotion, systems management, communication, problem-solving skills, and professionalism. Curricular coursework was organized into five groups: biomedical sciences, drug delivery, drug action, pharmacy practice management and health care delivery, and patient-centered care. A crosswalk of these coursework groups and those identified in this standard is below.

<b><u>Appendix B Elements</u></b>	<b><u>2009 Curriculum Course Categories</u></b>
Biomedical Sciences	Biomedical Sciences
Pharmaceutical Sciences	Drug Delivery, Drug Action
Social/Behavioral/Administrative Sciences	Pharmacy Practice Management and Health Care Delivery
Clinical Sciences	Patient-Centered Care

In the 2009 Curriculum revision, close attention was paid to the pre-requisites for admission. This resulted in modifications in the pre-pharmacy requirements; Statistics/biostatistics was deleted with content to be covered in P3 Study Design/Literature Evaluation course, Anatomy and Physiology were moved into the pre-pharmacy requirements with a Pathophysiology course sequence placed in P1. Microbiology was initially deleted from the pre-requisites and moved into the Infectious Disease courses. With further development of the Infectious Disease courses, microbiology was returned as an pre-requisite for candidates admitted in 2011 and thereafter. With these changes, almost all coursework in the Doctor of Pharmacy program is now taught by members of the College faculty with the exception of the Microbiology component that will continue to be presented by the microbiology faculty from the College of Arts and Sciences (CAS). In development of the Infectious Disease courses, there has been substantial dialog with the CAS faculty to ensure that the outcomes of the courses were understood. The same faculty member is responsible for the infectious disease component of the Pathophysiology course and has

been involved with the Doctor of Pharmacy program since 2000 and was responsible for instruction of the microbiology component of the baccalaureate program since the 1970's.

One of the principal components of the 2009 Curriculum is the integration of coursework to enhance students' understanding of the relationship between the pharmaceutical sciences and clinical sciences. This is highlighted in the revised curriculum in the Infectious Diseases courses and the Drug Action courses, both in P2. This integration builds upon the 2000 Curriculum's integration of Clinical Pharmacokinetics and Pharmacotherapeutics into a single course. In both curricula, the APPE ABOs are based on outcomes that require integration of previous course work with application to patient care.

The 2000 and 2009 Curricula were developed with attention to the pharmaceutical sciences serving as a foundation for applied sciences seen in P3 and P4. Biochemistry, Pharmaceutics/Drug Delivery, Anatomy/Physiology/Pathophysiology, and Integrated Lab/Practice Skills Labs are all components of P1 in both curricula. P2 emphasizes Medicinal Chemistry, Pharmacology (now combined in the Drug Action courses), Microbiology and Antimicrobial Therapy (now combined in the Infectious Disease courses), Pharmacokinetics, and Administrative Sciences. The clinical sciences are emphasized in P3 in both curricula with Study Design and Literature Evaluation, Pharmacotherapeutics, Pharmacoeconomics, Sociopharmacy and Pharmacy Law courses. To assist in integrating previous coursework, the 2009 Curriculum includes an innovative course, Integrated Case Studies, which will provide students with an opportunity to "bring together" components of Clinical Communications, Pharmacotherapeutics and Sociopharmacy. In P1 through P3, a foundation in the pharmaceutical sciences and clinical sciences is established for the P4 year, consisting of APPEs and the capstone Clinical Seminar course.

AACP/ACPE survey data, collected from graduates and alumni of the 2000 Curriculum, indicate that the curricular core provides a foundation for achievement of professional competencies upon entry into professional practice. Graduates in 2008 felt that the curriculum followed a logical progression with 69% SA/A; 72.4% of graduates in 2009 SA/A that the sequence of courses was appropriate to build knowledge and skills. In 2008 and 2009, 77.9% and 74.1% of graduates, respectively, felt that they were academically prepared for placement in the APPEs.

Alumni data, from the *2008 Survey*, confirms the breadth and depth of the 2000 Curriculum with 85.7% of respondents SA/A with the statement "the curriculum was properly sequenced." Alumni agreed that "coursework prepared me to enter my practice experiences" with 82.6% SA/A. Overall, 76.7% of alumni SA/A that "the courses I took prepared me to enter my first pharmacy job." Increased course integration, expanded experiential

components and formative assessments in the 2009 Curriculum are expected to provide survey data that are at least equal to that seen in 2000 Curriculum results.

- 3) **Comments:** Describe a) areas of the program that are noteworthy<sup>16</sup>; b) the program's assessment of its issues and its plans for addressing them with relevant timeframes; or c) findings that highlight areas of concern along with actions or recommendations to address them:

AACP/ACPE survey data from graduates and alumni is complimentary of the 2000 Curriculum indicating that the scientific foundation established supports the students' transition to the clinical sciences and entry into practice. With the thorough evaluation and revision of the ABOs for the program and an increased level of integration within the coursework, the resultant 2009 Curriculum is expected to provide students with knowledge, skills, attitudes and values that are consistent with professional expectations and accreditation standards. The updated ABOs more appropriately reflect the current and future practice of pharmacy.

Continued implementation of successive years in the 2009 Curriculum will be closely monitored with an assessment plan that collects data from internally developed sources, P1 and P2 reflective journals, as well as external sources such as the AACP/ACPE survey battery. In addition, the Curriculum Committee has reinstated course content surveys of all students in the 2009 Curriculum; that data will be used to monitor the alignment in content of courses outlined by the CRTF with those actually offered by faculty. The initial survey data indicates needed refinement in only one P1 course (see Appendix 13.1). This multi-level assessment plan will ensure that implementation follows the original design of the 2009 Curriculum and that specified outcomes are achieved. Further, this process will allow for *formative* assessment and rapid modification to provide successive students with refined course content and delivery from year to year.

- 4) **Quality Improvements:** Write any additional comments to further advance the quality of the program:

The continued refinements in the pre-pharmacy requirements will continue to be monitored. Student preparation and achievement in the Pathophysiology and Infectious Disease courses will serve as an important metric in determination of the appropriate pre-pharmacy coursework. Assessment of each successive year of the 2009 Curriculum will be critical in conducting formative assessments within the curricular transition window – 2009-2013.

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<sup>16</sup> Examples of Noteworthy Areas: A) Integrated learning is part of the standard philosophy of the college or school and integrated courses run efficiently. B) The course coordinator attends all classes. C) Multiple faculty are involved in course delivery.

5) **Final Evaluation:** Using your best professional judgment, evaluate how well the program meets the standard by putting a check in the appropriate box :

Meets the Standard	Partially Meets the Standard	Does Not Meet the Standard
<ul style="list-style-type: none"> <li>• Courses have coordinators and are integrated across disciplines.</li> <li>• Faculty from different disciplines communicate with each other and all disciplines are represented on committees.</li> <li>• Courses are well managed with content experts delivering specific topics as needed.</li> <li>• Faculty cooperate and work as teams when preparing courses.</li> <li>• The content is aligned with the recommendations listed in Appendix B of Standards 2007.</li> </ul>	<ul style="list-style-type: none"> <li>• The content is in the process of being mapped to the recommendations listed in Appendix B of Standards 2007.</li> <li>• The college or school has a plan and is in the process of addressing all issues related to not meeting the requirements of this standard.</li> </ul>	<ul style="list-style-type: none"> <li>• Courses are integrated in name, but not in actual practice, i.e., information is presented independently without respect to the material being covered by other disciplines.</li> <li>• Content areas noted in Appendix B of the Standards 2007 are not addressed in the curriculum.</li> <li>• The instruction provided by other academic units of the university does not meet the educational objectives of the curriculum.</li> </ul>
<input checked="" type="checkbox"/> <b>Meets the Standard</b>	<input type="checkbox"/> <b>Partially Meets the Standard</b>	<input type="checkbox"/> <b>Does Not Meet the Standard</b>

**Standard No. 14: Curricular Core—Pharmacy Practice Experiences:** The college or school must provide a continuum of required and elective pharmacy practice experiences throughout the curriculum, from introductory to advanced, of adequate scope, intensity, and duration to support the achievement of the professional competencies presented in Standard 12.

The pharmacy practice experiences must integrate, apply, reinforce, and advance the knowledge, skills, attitudes, and values developed through the other components of the curriculum. The objectives for each pharmacy practice experience and the responsibilities of the student, preceptor, and site must be defined. Student performance, nature and extent of patient and health care professional interactions, where applicable, and the attainment of desired outcomes must be documented and assessed.

In aggregate, the pharmacy practice experiences must include direct interaction with diverse patient populations in a variety of practice settings and involve collaboration with other health care professionals. Most pharmacy practice experiences must be under the supervision of qualified pharmacist preceptors licensed in the United States.

1) Use the checklist below to rate the program on the requirements of the standard and accompanying guidelines:

	S	N.I.
The college or school provides a continuum of required and elective pharmacy practice experiences throughout the curriculum, from introductory to advanced, of adequate scope, intensity, and duration to support the achievement of the professional competencies presented in Standard 12.	●	○
The pharmacy practice experiences integrate, apply, reinforce, and advance the knowledge, skills, attitudes, and values developed through the other components of the curriculum.	●	○
The objectives for each pharmacy practice experience and the responsibilities of the student, preceptor, and site are defined.	●	○
Student performance, nature and extent of patient and health care professional interactions, where applicable, and the attainment of desired outcomes are documented and assessed.	●	○
In aggregate, the pharmacy practice experiences include direct interaction with diverse patient populations in a variety of practice settings and involve collaboration with other health care professionals.	●	○
Most pharmacy practice experiences are under the supervision of qualified pharmacist preceptors licensed in the United States.	●	○
The college or school ensures that preceptors receive orientation regarding the outcomes expected of students and the pedagogical methods that enhance learning, especially for first-time preceptors prior to assuming their responsibilities, ongoing training, and development.	○	●
Students do not receive remuneration for any pharmacy practice experiences (introductory or advanced) for which academic credit is assigned. <sup>17</sup>	●	○
The introductory pharmacy practice experiences involve actual practice experiences in community and institutional settings and permit students, under appropriate supervision and as permitted by practice regulations, to assume direct patient care responsibilities.	●	○
All required advanced pharmacy practice experiences in all program pathways are conducted in the United States or its territories and possessions (including the District of Columbia, Guam, Puerto Rico, and U.S. Virgin Islands).	●	○
Required experiences include primary, acute, chronic, and preventive care among patients of all ages and develop pharmacist-delivered patient care competencies in the following settings: <ul style="list-style-type: none"> <li>● community pharmacy</li> <li>● hospital or health-system pharmacy</li> <li>● ambulatory care</li> <li>● inpatient/acute care general medicine</li> </ul>	○	●
The college or school has addressed the guidelines for this standard.	●	○

<sup>17</sup> A professional degree program in an institution that meets the definition and characteristics of “cooperative education” ([www.co-op.edu](http://www.co-op.edu)) may apply to ACPE for a waiver of this requirement.



2) **Describe** how the program is meeting the Standard and Guidelines. *(On average, text responses for this item, combined with text responses addressing items 3 and 4 below should not exceed 4 pages (4 pages/standard X 30 standards = 120 total text pages to address items 2,3, and 4 for each standard))*

The experiential component of the curriculum provides students with a series of direct patient care opportunities that build upon previous experiences, advancing the mastery of curricular ABOs. Assignment of IPPE and APPE is designed to provide students with a broad range of experiences through use of a variety of practice sites and health systems. For students with previous experiences, every effort is made to avoid placement at locations of previous employment to broaden their practice perspective and prevent the potential of remuneration, which is strictly forbidden by College policy. All clerkships are conducted under the preceptorship of licensed pharmacists, unless the specialty focus warrants otherwise. All required clerkships are under the preceptorship of College faculty or adjunct faculty and all are licensed pharmacists.

Implementation of the 2009 Curriculum has brought significant change to the IPPE and APPE components. In the 2009 Curriculum, IPPEs begin in P1 with a structured visit to a licensed pharmacy that is the basis for an in-class presentation. This experience totals 15 hours. In P2 and P3, students participate in longitudinal patient care experiences; groups of three students will be assigned to a chronically ill patient in the community for the length of one academic year. The students have specific assignments and tasks to accomplish with the assigned patient throughout the year. Patient encounters, peer group discussions and faculty led discussions total 15 hours per semester (30 hours per year). Conventional IPPEs, focusing on actual, hands-on practice experience in community practice and hospital/health-system practice are conducted following P1 and P2 respectively. Students complete a three-week assignment (120 hours) in each summer. P3 students build upon earlier P1 and P2 experiences with continuation of the longitudinal patient assignment. The level of engagement with the patient is increased as a result of the students' increasing understanding of clinical practice. In contrast, conventional IPPE assignments did not begin until P3 in the 2000 Curriculum and students were not assigned to longitudinal patient monitoring. The introduction of IPPEs earlier in the curriculum, along with coursework in professional communication and self-care in P1, was seen as a significant component of the revision process. All IPPE activities are guided by established outcomes for the institutional and community experience course objectives and structured grading rubrics (see Appendix 14.1 – IPPE Evaluation).

In the 2000 Curriculum, the Community IPPE is scheduled in either the Fall or Spring Semester of the P3 year with Institutional Practice assigned in the summer before or after P3. This later placement of IPPEs provides students with a broad foundation in the Pharmaceutical sciences, increasing their capabilities for direct patient care. Students are responsible for many general practice and patient-care-related activities including: patient interventions, patient counseling, over-the-counter medication recommendations, therapy reviews, and drug information questions. Students are also expected to continue the development of their communication skills and

professionalism. Prior to the P3 experiences, student pairs visit two different pharmacy practice settings and prepare a presentation in P1. In P2, a patient presentation is delivered in the Integrated Lab course based on monitoring an assigned nursing home patient. These experiences are designed to introduce the students to pharmacy practice and direct patient care while establishing basic competence in communication and problem solving in preparation for the P3 IPPEs.

In both the 2000 and 2009 Curricula, P4 consists of APPEs and the capstone Clinical Seminar Course. Students apply the knowledge, skills and abilities gained in previous didactic and experiential coursework in the direct care of patients. Required APPEs in both curricula include: inpatient/acute care general medicine (PHPR600/601[PHAR600/601]), ambulatory care (PHPR602/603[PHAR602/603}), and community pharmacy (PHPR611 [PHAR611]). Hospital/health-system pharmacy is an additional required APPE in the 2009 Curriculum. Each curriculum provides three elective APPEs with experiences totaling eight months in the 2000 Curriculum and nine months in the 2009 Curriculum. All clerkships are conducted in the United States except for an elective International Clerkship with placement in either Bath, UK, or Angers, FR. As a direct result of the College's distributed clinical practice sites, students completing the required APPEs are exposed to a variety of practice sites and practice models. This develops in each student a breadth of understanding in health care delivery models that would not be seen with placement in a single system.

To ensure consistency between the multiple practice sites, each APPE is guided by ABOs that are followed regardless of the site. As a first phase of implementing the 2009 Curriculum APPEs, the Pharmacy Practice department has identified ABOs achieved in the APPEs, then further assigned those identified to specific required APPEs or elective APPEs. This provides faculty and adjunct faculty members with a consistent set of outcomes to structure the APPE. Further, the APPE evaluation instrument has been refined and will be implemented in August, 2010. The current evaluation instrument is based on the 2000 curricular ABOs and has been criticized by preceptors as containing duplicative items. Grade inflation was also seen as a potential weakness of the current form. The revised evaluation instrument is based on the 2009 curricular ABOs and will serve as a means for introducing the 2009 Curricular ABOs into existing clerkships without an extended delay (see Appendix 14.3 – Revised APPE Evaluation form). IPPE and APPE evaluations will soon be available online to facilitate prompt evaluation of students

Preceptor recruitment and more formalized developmental programming is a focus of the Experiential Coordinator (EC). Currently, appointment of a new preceptor begins with an initial meeting with the EC to explain the important concepts of the rotation. Student outcomes are reviewed and the standardized student evaluations, linked to the outcomes identified, are discussed thoroughly. A formal orientation program is not conducted for new preceptors, but is under development to be introduced in Fall, 2010. Annually, two preceptor-

specific conferences are held by the College as outlined in Standard 26. Briefly, the three colleges of pharmacy in Michigan offer a joint program in February at the Michigan Pharmacists Association Annual Conference. This program offers preceptors an in-depth look at specific issues related to preceptorship, often focusing on student-preceptor interactions. Each summer, the College holds a Preceptors' Conference; this full-day program provides program updates, faculty perspectives shared with adjunct faculty and mentoring for adjunct faculty in both IPPE and APPE clerkships.

- 3) **Comments:** Describe a) areas of the program that are noteworthy<sup>18</sup>; b) the program's assessment of its issues and its plans for addressing them with relevant timeframes; or c) findings that highlight areas of concern along with actions or recommendations to address them:

In the *2008 AACP/ACPE Alumni Survey*, over 75% SA/A that the Doctor of Pharmacy program prepared them for their first job, and that elective courses met their needs. Graduates have consistently reported that the practice experiences developed their patient care skills, were of high quality, emphasized continuity of care throughout the health-care system, allowed for collaboration with other health-care providers, allowed for direct patient contact with diverse patient populations, and helped them achieve professional competencies.

Student satisfaction with the process for assigning IPPEs and APPEs increased from 2008 to 2009. In 2008, 62.8% SA/A the process worked well for IPPE scheduling and 57.6% for APPE scheduling. In 2009, 77.6% SA/A the process was fair for IPPE scheduling and 72.4% for APPE scheduling. Although computerized scheduling and revised policies for scheduling were implemented in 2006, student numbers in P3 also increased during this time. The improvement in data between 2008 and 2009 is likely a reflection of the College's efforts to fully inform students of the process and increase students' awareness that all rotation preferences will not be granted due to site limitations and class size.

In the *2007 Preceptor Survey*, respondents favorably evaluated several areas (SA/A) including: knowledge of process for documenting and addressing student performance (96.6%), handling student academic misconduct (72%), handling student professional misconduct (75%) knowledge of college harassment and discrimination policies (69.6%), preceptor performance criteria match well with responsibilities (85.8%), appropriate student-to-preceptor ratio at site (96%) and adequate facilities and resources (97.3%).

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<sup>18</sup> Examples of Noteworthy Areas: A) The college or school facilitates a communication network that links practice sites to each other, the school, and the curriculum. B) The college or school has a experiential advisory committee. C) A faculty member visits every student on every rotation. D) Assessment data on pharmacy practice experiences are used to improve instruction.

**4) Quality Improvements:** Write any additional comments to further advance the quality of the program:

Areas for improvement from the preceptor survey include clarity of criteria for performance evaluation as a preceptor (60%) and receiving student feedback on the rotation (60.8%). The College is aware of these problems and is working on improvements. An orientation presentation is under development and will be uploaded to the College Web-site as a component of an improved orientation program in Fall 2010. This will be complemented by an improved process for evaluation of preceptors as the College moves to a new platform for scheduling and evaluation exchange; the Experiential Team is in the process of formalizing a quality assurance program for both IPPE and APPE. This effort is in conjunction with the Michigan Colleges of Pharmacy Experiential Programs (McPEP), a collaboration of the State's three Colleges of Pharmacy.

Students in the 2000 Curriculum may elect to complete an APPE in hospital or health-system pharmacy, but it is not required. The potential for applying this requirement to the 2000 Curriculum retroactively was explored, but it was elected not to require it in the existing curriculum as development of hospital IPPE for the 2009 Curriculum in P2 would occupy the practice sites needed for the P4 APPE in the 2000 Curriculum if required for all students.

5) **Final Evaluation:** Using your best professional judgment, evaluate how well the program meets the standard by putting a check in the appropriate box :

Meets the Standard	Partially Meets the Standard	Does Not Meet the Standard
<ul style="list-style-type: none"> <li>• The introductory through advanced practice experiences form a continuum with no gaps.</li> <li>• The college or school provides elective rotations.</li> <li>• Introductory experiences expose students to actual practice sites not simulated ones.</li> <li>• Most experiences are under the supervision of a pharmacist.</li> <li>• The student-to-preceptor ratio facilitates individual instruction, guidance, supervision, and assessment.</li> <li>• Students are not paid for practice experiences.</li> <li>• Preceptors are primarily licensed as pharmacists.</li> <li>• Preceptors are trained to meet the needs of the college or school and have defined positions with it.</li> <li>• Preceptors evaluate students and vice versa.</li> <li>• The college or school has quality assurance mechanisms that include visiting sites.</li> <li>• The coordination and management of rotations is straightforward and efficient (e.g., students are notified in a timely manner whether their choices for rotations have been accepted).</li> <li>• Rotations occur in diverse practice settings covering all required areas (community, institutional, etc.).</li> <li>• Practice experiences cover diverse patient populations in terms of disease state, race, age, gender, and cultural background.</li> <li>• The college or school has criteria for defining the level of practice (e.g., advanced community) which are validated by the faculty (e.g., worksheet to enroll a preceptor; review syllabi for the rotation).</li> <li>• The practice experiences support the achievement of the required professional competencies.</li> <li>• Student outcomes and patient interaction are documented and assessed.</li> </ul>	<ul style="list-style-type: none"> <li>• Some introductory practice experiences are missing in first 3 academic years or the progression of experiences do not form a continuum from introductory to advanced.</li> <li>• The college or school has quality assurance mechanisms that do not include visiting sites.</li> <li>• The college or school has a plan and is in the process of addressing all issues related to not meeting the requirements of this standard.</li> <li>• Some required areas are not adequately covered.</li> </ul>	<ul style="list-style-type: none"> <li>• One or more required introductory or advanced experiences is/are missing.</li> <li>• Preceptors are not properly trained.</li> <li>• Some preceptors are not licensed in the state of practice.</li> <li>• Required rotations fall below the expectations the standard.</li> <li>• One or more required pharmacy practice experiences occur(s) overseas.</li> <li>• The college or school has no quality assurance mechanisms.</li> <li>• The college or school has an inadequate number of preceptors.</li> <li>• The majority of students are not precepted by pharmacists.</li> <li>• Outcomes are not documented or not assessed.</li> </ul>
<input checked="" type="checkbox"/> <b>Meets the Standard</b>	<input type="checkbox"/> <b>Partially Meets the Standard</b>	<input type="checkbox"/> <b>Does Not Meet the Standard</b>

**Standard No. 15: Assessment and Evaluation of Student Learning and Curricular Effectiveness:** As a component of its evaluation plan, the college or school must develop and carry out assessment activities to collect information about the attainment of desired student learning outcomes. The assessment activities must employ a variety of valid and reliable measures systematically and sequentially throughout the professional degree program. The college or school must use the analysis of assessment measures to improve student learning and the achievement of the professional competencies.

The college or school must systematically and sequentially evaluate its curricular structure, content, organization, and outcomes. The college or school must use the analysis of outcome measures for continuous improvement of the curriculum and its delivery.

1) Use the checklist below to rate the program on the requirements of the standard and accompanying guidelines:

	S	N.I.
The college or school develops and carries out assessment activities to collect information about the attainment of desired student learning outcomes. The assessment activities employ a variety of valid and reliable measures systematically and sequentially throughout the professional degree program.	●	○
The college or school uses the analysis of assessment measures to improve student learning and the achievement of the professional competencies.	○	●
The college or school systematically and sequentially evaluates its curricular structure, content, organization, and outcomes.	●	○
The college or school uses the analysis of outcome measures for continuous improvement of the curriculum and its delivery.	●	○
The college or school has developed a system to evaluate curricular effectiveness.	●	○
The college or school ensures the credibility of the degrees it awards and the integrity of student work.	●	○
The college or school has addressed the guidelines for this standard.	●	○

2) **Describe** how the program is meeting the Standard and Guidelines. *(On average, text responses for this item, combined with text responses addressing items 3 and 4 below should not exceed 4 pages (4 pages/standard X 30 standards = 120 total text pages to address items 2,3, and 4 for each standard)*

The Assessment Committee (AC) is charged with the task of assessment for the College of Pharmacy including developing tools, implementation, evaluation and dissemination of information to the appropriate individuals/groups. This committee is made up of faculty from each of the departments and is chaired by the Assistant Dean of Student Affairs and Assessment (ADSAA). Assessment data are organized under the University's recently implemented TracDat system. The TracDat system is a secured, web-based application designed for colleges or universities to organize their assessment activities. Programmatic and course-level objectives can be input along with means of assessment, results, criteria for success, follow-up and curricular and standards mapping. The University is in the process of cross-campus implementation of the system to assist in a centralized organization of assessment activities. The College of Pharmacy has consolidated its assessment activities using the TracDat system, which assists greatly in the organization of ability-based outcomes, course level objectives, AACP survey data, curricular and programmatic outcomes, results reporting and curricular mapping.

The assessment plan centers on curricular and programmatic outcomes. Curricular outcomes are taken directly from the faculty approved (2007) ability-based outcomes (ABOs) for the Doctor of Pharmacy program. Programmatic outcomes include a number of other policy, procedural and facility-related outcomes deemed important by the AC. Many of these programmatic outcomes are measured by the AACP surveys. The College of Pharmacy currently utilizes the graduate, faculty, alumni and preceptor surveys. Faculty and graduate surveys were last administered in 2009, alumni surveys in 2008 and preceptor surveys in 2007. All surveys are being run in 2010. The assessment plan in TracDat identifies the curricular and programmatic outcomes, means of assessment for each identified outcome, criterion for success, assessment schedule, and related courses (when applicable) within the College specific to each assessment. Criteria for success were identified by the AC as at least two-thirds of respondents rating agree or strongly agree. Comparisons to national averages for other participating Colleges of Pharmacy are also monitored. The unit assessment report within TracDat links the outcome, means of assessment as well as criterion for success to results along with an action plan and follow-up. Access to TracDat has recently been expanded to include all faculty members within the College of Pharmacy, facilitating their review of assessment data and allow for input of course-level information into the system.

The College of Pharmacy implemented an electronic portfolio for students with the Fall, 2009 entering class. The electronic portfolio is organized and maintained within the University's course management software (CMS, Blackboard). The decision to start with the University CMS was made to allow the College to test different components of an electronic portfolio before committing to dedicated software. Assessment activities in the portfolio included two reflective writing assignments (entrance to the College of Pharmacy; and key characteristics

of a health care professional), and a mock patient counseling assignment. Students also conducted a self assessment of ability-based outcomes as part of the portfolio. Finally, curricular content evaluations for the P1 year were conducted in the portfolio.

Non-AACP survey data being used for assessment of curricular and programmatic outcomes include:

- Reflective writings by students in the electronic portfolio system: one to two reflective writings are given each year to students. These are scored for basic grammar and spelling, as well as content, professional development and integration with course material.
- Student self-assessment of the faculty approved ability-based outcomes: At the end of each academic year, students are asked to self-assess their competency on the ability-based outcomes for the program.
- Prescription simulations collected in the Practice Skills Labs: Student in P2 year complete prescription simulations that serve to integrate information from the P1 and P2 years of the program.
- The student presentations as part of the clinical seminar course (P4 year) are utilized as one form of embedded assessment.
- Comprehensive exams in Therapeutics are being evaluated as another tool for embedded assessment.
- Course content evaluations: Students complete an evaluation of each course at the end of the semester and provide the Curriculum Committee with feedback on the extent to which the faculty-approved content was covered and tested in the course.
- Results from NAPLEX and MPJE examinations.

The use of the TracDat system has organized and improved the assessment activities of the College of Pharmacy. The system provides a mechanism to insure that all assessment data reside in a single location, that a systematic mechanism exists to insure all data is tracked longitudinally, and that data is mapped against curricular, programmatic or course outcomes. Each data point must be assessed against a criteria for success, including a “Meets” or “Does not Meet” criteria toggle. Actions and follow-up are also systematically tracked within the system. The Assessment Plan Report within TracDat provides general accreditation information on each program, mission statement, outcomes, means of assessment, criteria for success and course mapping on each outcome (see Appendix 15.1). The University “Four-Column Report” provides more detailed information including outcomes, means of assessment, data results, action and follow-up (see Appendix 15.2). The College of Pharmacy has also programmed a Variance Report, which identifies all outcomes that have “not met criteria” along with action and follow-up. The Variance Report allows the AC and the faculty to quickly access problem areas identified by the assessment system. Curricular mapping also exists within the system.

Data from the *Faculty Survey* indicate that only 38.1% in 2009 compared to 46.7% in 2007 felt the college uses programmatic assessment data to improve the curriculum. At the time of the 2009 survey, the University and College were only in the beginning stages of implementation of the TracDat system. Since that time, all assessment



data have been migrated to this system, along with greater organization and expansion of the assessment plan. Updates are given to the faculty at regular intervals during faculty meetings, and faculty are now beginning their training on accessing the TracDat system.

Assessment of individual courses is done at two levels. Students complete a content evaluation of each course in the revised curriculum at the end of the semester and provide the Curriculum Committee with feedback on the extent to which the faculty-approved content was covered and tested in the course. Student ratings of instruction for each course as well as for each instructor within that course are conducted using the Student Assessment of Instruction (SAI) form. This allows for assessment of content within the course as well as students' perception of faculty knowledge and dissemination of the information. SAI results provide the opportunity to utilize student feedback for course improvement.

- 3) **Comments:** Describe a) areas of the program that are noteworthy<sup>19</sup>; b) the program's assessment of its issues and its plans for addressing them with relevant timeframes; or c) findings that highlight areas of concern along with actions or recommendations to address them:

The implementation of the TracDat system by the University has provided a systematic mechanism to organize the assessment activities of the college. The system allows mapping of outcomes, coursework, means of assessment and results in a comprehensive and automated fashion, with longitudinal data tracking. Report writing capabilities allow for customization of results reporting. Implementation of this system began in the summer, 2009 for curricular and programmatic outcomes. The College is currently working on course-level outcomes and assessment.

A portfolio system was initiated for the class entering in the Fall, 2009 with good results. Over the course of the academic year, some decrease in participation on assignments has been identified. The Assessment Committee is in the process of reviewing the first year results and will make recommendations on the next phase of the implementation. The portfolio system will expand to include all pharmacy students with each subsequent enrolling class and further reflective writing and case scenarios will be developed for the P2-P4 years. Simultaneously, the University is also exploring the potential adoption of a common portfolio system.

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<sup>19</sup> Examples of Noteworthy Areas: A) The college or school uses capstone exams. B) Faculty use student portfolios for obtaining feedback about student learning. C) Portfolio assignments are mapped back to the competencies. D) Assessment of work on portfolios is sent to the course instructors.

4) **Quality Improvements:** Write any additional comments to further advance the quality of the program:

In the 2007 *AACP Faculty Survey* 40% of faculty disagreed/strongly disagreed (D/SD) the College used analysis of assessment measures to improve curricular delivery (13.3% were unable to comment). This improved in 2009 to only 28.5% D/SD. However, in the 2009 survey, 33.3% of faculty were unable to comment and only 38.1% SA/A that the College was using assessment measures to improve curricular delivery. Previous graduate surveys (designed by the College and used prior to the use of the AACP surveys) were used by the Assessment Committee to give feedback to the curricular revision process. This survey data was used in the curriculum revision in considering placement of courses in the curriculum and in assigning credits to courses and balancing student loads.

The Assessment Committee, through the *AACP Faculty Survey*, has identified that it is necessary to provide more information to the faculty about how assessment data is determined, collected, reported and used. Actions, which have been taken since that survey include:

- The Assistant Dean of Student Affairs and Assessment position has been filled. Previously assessment activities were coordinated through the Department Head for Pharmaceutical Sciences. The Assistant Dean of Student Affairs and Assessment now serves as the Chair for the Assessment Committee of the college.
- The University is in the process of consolidating all assessment activities under the TracDat system. In the summer of 2009, the College also brought all assessment-related activities under TracDat as well. This system provides a “one-stop”, web-enabled system for programmatic and curricular assessment tracking. In the first phase of the implementation, which is now completed, all AACP survey data, ability-based outcome student self-assessment data, Curriculum Committee content evaluation data for the new curriculum, portfolio data and other assessment information has been entered into the system. In addition, curricular outcomes, ACPE standards and coursework have been entered and mapped. This data portal is now used by the college AC to direct its activities and recommendations.
- All faculty have recently been given access to the TracDat system. This provides them with complete access to all information within the system, including all reports. Course-level outcomes have been entered into the system and faculty are in the process of beginning orientation to this portion of TracDat. This will allow faculty to begin to add course-level assessment information.

5) **Final Evaluation:** Using your best professional judgment, evaluate how well the program meets the standard by putting a check in the appropriate box :

Meets the Standard	Partially Meets the Standard	Does Not Meet the Standard
<ul style="list-style-type: none"> <li>• Assessment data are used for program improvement.</li> <li>• The college or school uses multiple measures to evaluate professionalism.</li> <li>• The college or school has a systematic plan for assessing student learning outcomes.</li> <li>• The college or school is gathering and using both formative and summative assessment data.</li> <li>• Portfolios document progressive achievement of the competencies through integrated learning experiences.</li> <li>• Students are involved in self assessment.</li> </ul>	<ul style="list-style-type: none"> <li>• The assessment plan is not systematic.</li> <li>• Data from the assessment plan are not analyzed or not fed back into the curriculum.</li> <li>• The college or school has a plan and is in the process of addressing all issues related to not meeting the requirements of this standard.</li> </ul>	<ul style="list-style-type: none"> <li>• The college or school has no assessment plan or does not systematically carry out evaluations of student learning and curricular effectiveness.</li> <li>• The college or school can not document progressive achievement of the competencies as demonstrated in the learning experience.</li> <li>• The college or school does not have mechanisms to diagnose and correct underlying problems that might diminish learning such as perceived stress on the faculty, staff, or students.</li> <li>• Assessment and evaluation activities to allow comparison of outcomes between alternate program pathways are not carried out.</li> <li>• Data is not used to improve the curriculum or its delivery.</li> <li>• Assessment activities do not use valid or reliable measures.</li> <li>• Assessment activities do not include assessment of students, faculty or preceptors.</li> <li>• Assessment methods do not promote consistency and reliability within and among faculty, practice sites and preceptors.</li> <li>• No systems are in place to ensure the integrity of student work and limit opportunities for academic misconduct.</li> </ul>
<input type="checkbox"/> Meets the Standard	<input checked="" type="checkbox"/> Partially Meets the Standard	<input type="checkbox"/> Does Not Meet the Standard

## **d. Students**

### **For Standards 16-23:**

Use a check  to indicate the information evaluated to assess the standards in this section:

- Synopsis of the Curriculum Vitae of the student affairs administrative officer. (16)
- An organizational chart depicting student services and the corresponding responsible person(s). (16)
- Description of the nature of student services offered. (16)
- Examples of documents used for student orientation. (16)
- Student Handbook **(to be made available on site)**. (16, 21)
- Description of sections of the student handbook that deal with specific requirements of the standard and guidelines. (16)
- Professional Technical Standards<sup>20</sup> for the school or college and/or university. (16)
  
- Admissions and enrollment information, highlighting how specific requirements of the standards and guidelines are met. (17)
- Evidence that enrollment is managed in alignment with available physical, financial, staff, faculty, practice site, preceptor and administrative resources. (17)
- Description of the college or school's recruitment methods. (17)
- Recruitment and admissions data. (17)
- Examples of recruitment methods: college or school's catalog, recruitment brochures, college or school Internet site. (17)
- Aggregate data on student employment after graduation. (17)
- Curricular outcomes data correlated with admissions data (Standard 3). (17)
- Description of methods used to assess verbal and written communication skills. (17)
- If applicable, example of an Early Assurance Program agreement between the college or school and the associated institution(s) or student. (17)
  
- Student transfer credit and course waiver policies. (18)
- Number of transfer students and correlation of transfer policy and success in the program. (18)
  
- Student progression policy consistent with the college or school's mission. (19)
- Data on student matriculation, progression and graduation rates correlated to admission and transfer policies. (19)
- Section of the student handbook that covers the student progression policy. (19)
  
- Copy of policy and procedures for handling complaints related to ACPE Standards. (20)
- Description of how the complaint policy is communicated to students. (20)
- Discussion of number of complaints since last accreditation visit and the nature of their resolution. (20)
- College or school's catalog, recruitment brochures **(to be made available on site)**. (21)
- URL to program information on the college or school's Internet site. (21)
  
- List of committees involving students and the names and professional years of students involved on committees. (22)
- Description of other methods (e.g., focus groups, meetings with the Dean or other administrators, involvement in self study activities, review of student complaints) used to gather student perspectives. (22)
- Examples of quality improvements in the college or school that have been made as a result of student representation and perspectives. (22)
  
- The college or school's codes of conduct addressing professional behavior and harmonious relationships. (23)
- Description of strategies that the college or school has used to promote professional behavior; and the outcomes. (23)
- Description of strategies that the college or school has used to promote harmonious relationships among students, faculty, administrators, preceptors, and staff; and the outcomes. (23)
- Description of strategies that the college or school has used to promote student mentoring and leadership development; and the outcomes. (23)
  
- Interpretation of the data from the AACCP Surveys of Students, Faculty, Preceptors and Alumni.
- Raw data from the AACCP Surveys of Students, Faculty, Preceptors and Alumni.
- Other documentation or data that provides evidence of meeting the standard.

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<sup>20</sup> Professional technical standards are established by the university, college, or school based on the physical and mental attributes required of students to be able to function competently as a pharmacist upon graduation.

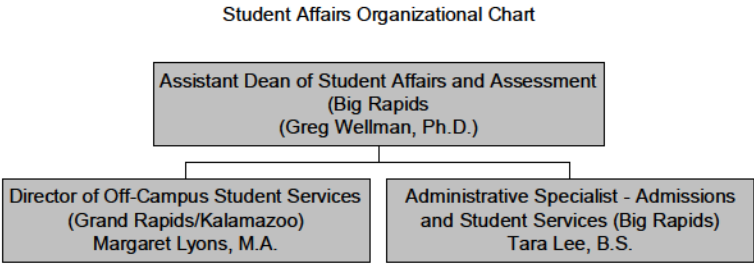
**Standard No. 16: Organization of Student Services:** The college or school must have an organizational element(s) devoted to student services. The administrative officer responsible for this organizational element must oversee and coordinate the student services of the college or school.

1) Use the checklist below to rate the program on the requirements of the standard and accompanying guidelines:

	S	N.I.
The college or school has an organizational element(s) devoted to student services.	<input checked="" type="radio"/>	<input type="radio"/>
The organizational element(s) devoted to student services has an administrative officer responsible for overseeing and coordinating them.	<input checked="" type="radio"/>	<input type="radio"/>
The college or school has an ordered, accurate, and secure system of student records which are confidential and maintained in compliance with the Family Educational Rights and Privacy Act (FERPA).	<input checked="" type="radio"/>	<input type="radio"/>
Student services personnel are knowledgeable regarding FERPA law and its requirements.	<input checked="" type="radio"/>	<input type="radio"/>
The college or school provides students with financial aid information and guidance.	<input checked="" type="radio"/>	<input type="radio"/>
The college or school offers access to adequate health and counseling services for students. Appropriate immunization standards exist, along with the means to ensure that such standards are satisfied.	<input checked="" type="radio"/>	<input type="radio"/>
The college or school has policies in place so that students who have off-campus classes or pharmacy practice experiences fully understand their insurance coverage and where and how to access health and counseling services.	<input checked="" type="radio"/>	<input type="radio"/>
The college or school has a policy on student services, including admissions and progression, that ensures nondiscrimination as defined by state and federal laws and regulations, such as on the basis of race, religion, gender, lifestyle, sexual orientation, national origin, or disability.	<input checked="" type="radio"/>	<input type="radio"/>
The college or school has addressed the guidelines for this standard.	<input checked="" type="radio"/>	<input type="radio"/>

2) **Describe** how the program is meeting the Standard and Guidelines. (On average, text responses for this item, combined with text responses addressing items 3 and 4 below should not exceed 4 pages (4 pages/standard X 30 standards = 120 total text pages to address items 2,3, and 4 for each standard)

Student services are the responsibility of the Assistant Dean of Student Affairs and Assessment (ADSAA), who is assisted by an Administrative Specialist and the Director of Off-Campus Student Services (DOCSS). The former is stationed in Big Rapids, and the latter is based at the Grand Rapids and Kalamazoo instructional sites. The primary responsibilities of the Assistant Dean are College admissions, monitoring of student progression, development of academic standards, student counseling, student record-keeping, verification of degree requirements and oversight of assessment activities.



The Assistant Dean of Student Affairs and Assessment serves as Chair of the Admissions Committee and Progressions Committee. The Admissions Committee oversees the ongoing evaluation and assessment of admission criteria for the Doctor of Pharmacy program and makes recommendations to the full faculty. This committee also reviews and approves procedures for interviewing candidates. The Progressions Committee reviews criteria for student advancement in and dismissal from the program. Student services also includes planning of new student orientation as well as orientation for students as they transition to the 3<sup>rd</sup> and 4<sup>th</sup> professional years. This unit works closely with the University Office of Admissions & Records, as it relates to new and transfer students, Office of Financial Aid and Disability Services Office.

Current student records are kept in secure locations in the pharmacy building in Big Rapids and in the off-campus sites in Grand Rapids and Kalamazoo. The main files are located in the Dean’s Office with archived records kept in a locked storeroom within the building. The University is in compliance with the Family Educational Rights and Privacy Act (FERPA) rules and maintains information for students at: <http://www.ferris.edu/admissions/registrar/schdbook/page15.htm>. Pharmacy staff members who handle these records have been trained in FERPA policy. The Office of the Registrar continues to update faculty and staff throughout the campus regarding FERPA rules and their interpretation.

Academic transcripts are maintained on the University Banner system, which is a password secured system. Students are informed of their rights to access their own records via an online student policy handbook available at: <http://www.ferris.edu/htmls/colleges/pharmacy/Editor/Files/Student-Handbook-2009-Fall.pdf>.

Student financial aid support is provided through the University's Financial Aid office. A senior financial aid specialist is responsible for all financial aid-related issues for the College's students. The Assistant Dean of Student Affairs and Assessment is in periodic contact with the financial aid representative to discuss student issues and problems. All students who have received Perkins and Direct Student Loans are directed to online exit counseling that fulfills the federal exit counseling requirements. Along with numerous scholarships awarded each year that are funded by corporate and private donations, thirty-five incoming first year students are provided \$3,000 awards that are renewable for four years provided the awardees maintain a 2.0 overall professional GPA. The scholarships are awarded based upon the student's admissions ranking and his/her financial need as determined by the Financial Aid office. Approximately 70% of pharmacy students receive some form of financial aid. Of these students, approximately 80% (82% - 2008 survey; 78% - 2009 survey) agreed or strongly agreed that the financial aid advising met their needs (from *AACP Graduate Survey*).

Comprehensive student services are made available for students at each of the sites (Big Rapids: professional years 1-2; Kalamazoo/Grand Rapids: professional years 3-4) according to the table below.

	<b>Big Rapids</b>	<b>Grand Rapids</b>	<b>Kalamazoo</b>
<b>Health Insurance</b>	FSU Student Health Insurance Program	FSU Student Health Insurance Program	FSU Student Health Insurance Program/May option Western Michigan University Health Insurance Program
<b>Academic Counseling</b>	Faculty Advisor, Assistant Dean of Student Affairs and Assessment	Faculty Advisor, Director of Off Campus Student Services, Assistant Dean of Student Affairs and Assessment	Faculty Advisor, Director of Off Campus Student Services, Assistant Dean of Student Affairs and Assessment
<b>Personal Counseling</b>	University Health Center	Referral recommendations from University Health Center Medical Director; WMU Counseling Center	Referral recommendations from University Health Center Medical Director: WMU-GR Counseling Center
<b>Medical Care</b>	University Health Center	Spectrum Health Urgent Care Network	Sindecuse Health Center (Western Michigan University)
<b>Fitness Center</b>	University Recreation Center	Ford Fieldhouse (Grand Rapids Community College Recreation Center); Endurance Fitness Center – GRMEP Building	Western Michigan University Recreation Center
<b>Parking</b>	University Parking Permit	GRMEP Parking Lot (Fee)	Western Michigan University Parking Permit

Orientation sessions are scheduled for incoming professional year 1 students; professional year 3 students transitioning to the off-campus sites (half day) and professional year 4 students transitioning to advanced pharmacy practice experiences (1-day). These sessions include information on the student services available, and any relevant changes in how those services are accessed at the different sites. Approximately 75-80% of students utilize health services to some degree during Pharmacy school. For students who utilized health services, 82% (2008) and 76% (2009) agreed in the *Graduate Survey* that the services met their needs.

To ensure compliance with all affiliated healthcare facilities and the United States Department of Labor Occupational Safety & Health Administration (OSHA) immunization requirements, the College has contracted with Spectrum Health Occupational Services to evaluate student immunization records. This evaluation is generally based on two levels of documentation. First, a clear and concise record of immunization provided by a physician's



office or a healthcare facility (such as a clinic). Second, if the record of immunization is not documented clearly, then verification of immunity through titer assay will be required. While enrolled in the College, students must maintain all immunization records and submit annual updates as deemed appropriate (i.e. annual TB skin tests, Tdap updates, etc.). Annual deadlines and completion instructions are maintained on the secured FerrisConnect (WebCT) student information system. Standard immunization requirements include: TB skin testing, Rubella and Rubeola, Varicella, Hepatitis B, and Tetanus/Diphtheria/Pertussis.

Applicants to the 4-year Doctor of Pharmacy program are evaluated based on criteria that are outlined in Appendix 16.1. These criteria are published on the College website and are available to students at: [http://www.ferris.edu/htmls/colleges/pharmacy/link\\_desc.cfm?LinkID=59](http://www.ferris.edu/htmls/colleges/pharmacy/link_desc.cfm?LinkID=59). Criteria are applied in an unbiased way without consideration of race, religion, gender, lifestyle, sexual orientation, national origin, or disability. The College has recently adopted a set of technical standards (Appendix 16.2), which outlines any limitations that might prevent a student from successfully completing the program.

The College works actively to insure that students throughout the State of Michigan have the opportunity to pursue a career in pharmacy. The Office of Student Affairs and Assessment maintains transfer guides for 4-year and 2-year colleges and universities across the state, including urban and rural institutions. Pre-pharmacy requirements based on each institution's catalog are established providing students throughout the state a college-specific prescription for successful application to the program.

Academic policies exist with established standards for student progression through each of the four professional years. These policies center on maintenance of a minimum grade point average (2.0) at the end of each professional year; avoiding failure of 50% or more of credit hours in any semester; and avoiding failure in any course more than once. Progression policies are published in the student handbook, which is available online for students. These policies are also reviewed during student orientation.

3) **Comments:** Describe a) areas of the program that are noteworthy<sup>21</sup>; b) the program's assessment of its issues and its plans for addressing them with relevant timeframes; or c) findings that highlight areas of concern along with actions or recommendations to address them:

The DOCSS responsibilities have expanded significantly since the last accreditation report. Through the DOCSS, an Advisors' Council has been formed, composed of off-campus faculty advisors from the professional student organizations. The Advisors' Council coordinates student activities and projects at each instructional site with linkages to on-campus activities. Additional responsibilities of the DOCSS include: focused meetings with student representatives each semester, serving as a liaison between students and the program or faculty members

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<sup>21</sup> Examples of Noteworthy Areas: A) Students report that specific student service staff go above and beyond the call of duty to help them. B) Facilities continually exceed the expectations of students.

and individual student counseling. This has led to an improved transition for students as they progress through the curriculum, continuing the on-campus support they have come to expect to the off-campus instructional sites.

For students who utilized financial aid, 90% (2008) and 78% (2009) agreed in the *Graduate Survey* that the services met their needs. 79% (2008) and 91% (2009) of students agreed that the College is welcoming to students with diverse backgrounds.

4) **Quality Improvements:** Write any additional comments to further advance the quality of the program:

5) **Final Evaluation:** Using your best professional judgment, evaluate how well the program meets the standard by putting a check in the appropriate box :

Meets the Standard	Partially Meets the Standard	Does Not Meet the Standard
<ul style="list-style-type: none"> <li>• An administrative officer oversees student services.</li> <li>• Students indicate that student services are meeting their needs.</li> <li>• The organizational element devoted to student services has adequate financial and personnel resources to support the needs of students.</li> <li>• Student services for pharmacy students are coordinated with university support services.</li> <li>• Personnel are knowledgeable and aware of what they need to support students.</li> </ul>	<ul style="list-style-type: none"> <li>• The college or school has a plan and is in the process of addressing all issues related to not meeting the requirements of this standard.</li> </ul>	<ul style="list-style-type: none"> <li>• Complaints reported about student services appear to be valid.</li> <li>• Students appear to be confused about procedures in the school that should have been covered in student orientation.</li> <li>• Students have not received an orientation.</li> <li>• Student services do not know how to address pharmacy students' needs.</li> <li>• The student services office is poorly coordinated or communicates poorly to students.</li> <li>• Health and counseling services are either absent or not adequate for students.</li> <li>• Financial aid or guidance is either absent or not adequate for students.</li> <li>• Student records and confidential documents are poorly maintained and not secure.</li> <li>• There is evidence of discrimination.</li> <li>• The college or school has a high level of student complaints.</li> </ul>
<input checked="" type="checkbox"/> <b>Meets the Standard</b>	<input type="checkbox"/> <b>Partially Meets the Standard</b>	<input type="checkbox"/> <b>Does Not Meet the Standard</b>

**Standard No. 17: Admission Criteria, Policies, and Procedures:** The college or school must produce and make available to students and prospective students criteria, policies, and procedures for admission to the professional degree program. Admission materials must clearly state academic expectations, required communication skills, types of personal history disclosures that may be required, and professional standards for graduation. As a component of its evaluation plan, the college or school must regularly assess the criteria, policies, and procedures to ensure the selection of students who have the potential for academic success in the professional degree program and the ability to achieve the professional competencies and to practice in culturally diverse environments.

Student enrollment must be managed in alignment with available physical, financial, faculty, staff, practice site, preceptor, and administrative resources. The dean and a duly constituted committee of the college or school must share the final responsibility for enrollment and selection of students.

1) Use the checklist below to rate the program on the requirements of the standard and accompanying guidelines:

	S	N.I.
The college or school produces and makes criteria, policies, and procedures for admission to the professional degree program available to students and prospective students.	●	○
Admission materials clearly state academic expectations, required communication skills, types of personal history disclosures that may be required, and professional standards for graduation.	●	○
As a component of its evaluation plan, the college or school regularly assesses the criteria, policies, and procedures to ensure the selection of students who have the potential for academic success in the professional degree program and the ability to achieve the professional competencies and to practice in culturally diverse environments.	●	○
Student enrollment is managed in alignment with available physical, financial, faculty, staff, practice site, preceptor, and administrative resources.	●	○
The dean and a duly constituted committee of the college or school share the final responsibility for enrollment and selection of students.	●	○
Written and verbal communication skills are assessed for student admissions in a standardized manner.	●	○
The college or school develops and employs admission criteria that set performance expectations for admission tests, evaluations, and interviews used in selecting students who have the potential for success in the professional degree program and the profession.	●	○
Admission criteria, policies, and procedures are not compromised regardless of the size and quality of the applicant pool.	●	○
Consultation with ACPE occurs at least six months before recruiting students into new pathways or programs. N/A (no new pathways or programs) <input type="checkbox"/>	●	○
The college or school has addressed the guidelines for this standard.	●	○

2) **Describe** how the program is meeting the Standard and Guidelines. *(On average, text responses for this item, combined with text responses addressing items 3 and 4 below should not exceed 4 pages (4 pages/standard X 30 standards = 120 total text pages to address items 2,3, and 4 for each standard)*

The importance of a well documented, objective and consistent admission process, clearly communicated to all appropriate stakeholders, is recognized by the College. Revision of the admission process over the past two years has focused on ensuring that all candidates are treated fairly and that the most qualified candidates are offered admission to the program. This is evidenced by revision of the Pharm.D. curriculum that began in 2006 with initial development of the pre-pharmacy course requirements. The pre-pharmacy requirements were addressed first to ensure that all pre-pharmacy programs and candidates were fully aware of changes with adequate time to meet them (Appendix 17.1). Adoption of face-to-face interviews as a component of the admission process was announced via the College's website and through direct communication with outside institutions well in advance of actual implementation. Interviews were included as a potential component of admissions two years prior to actual implementation. Additionally, the program's web-based application is updated annually to reflect evolving standards including criminal background checks and drug screening procedures with the implications of positive findings clearly outlined. (See Pharmacy Web-site [http://www.ferris.edu/htmls/colleges/pharmacy/link\\_desc.cfm?LinkID=59](http://www.ferris.edu/htmls/colleges/pharmacy/link_desc.cfm?LinkID=59) and Pharmacy Application <https://www.ferris.edu/admissions/application/pharm/> )

All admissions materials are available through the College website to provide candidates with the most current information. This includes a thorough discussion of admission criteria (see Appendix 17.2 (a)) with a compilation of academic demographics for the most recent class. Supplemental information requested on the application includes: previous employment, community service activities and student/professional organization memberships. To be considered for admission to the Doctor of Pharmacy program, the applicant must have a cumulative pre-pharmacy required course GPA of no less than 2.5 and a PCAT composite score of no less than the 50th percentile. A complete discussion regarding criminal background searches and drug screens is provided and candidates are encouraged to contact University or College representatives for additional information. Students enrolled in the pre-pharmacy curriculum at Ferris State University and participating in its Honors Program are eligible for the "honors assurance" (see criteria in Appendix 17.2(b)). The purpose of this program is to attract top-quality students to the University's pre-pharmacy program and to alleviate the anxiety of honors students who were concerned about their admissions status, despite having outstanding academic credentials. General information regarding admissions to the College is included in Appendix 17.3 and 17.4. The College Admissions Committee (CPAC) annually reviews the admissions formula used to rank candidates. The review consists of a statistical regression of various admission metrics (primarily prerequisite GPA and PCAT scores) and student performance in the Doctor of Pharmacy program. The resultant formula consists of coefficients (weightings) of composite scores

in math, biology and chemistry courses as well as PCAT and interview scores. The formula results in a ranking for each candidate. Adjustments to the formula are made annually based on the performance of the entering class, with weightings modified to identify candidates more likely to be successful in the curriculum. The results of the regression are shown in Appendix 17.5 for entering classes between 2005 and 2008. The annual review and admissions formula revision is validated by a consistently low rate of attrition within the program; for admission years 2004-2008, approximately 4% of the admitted class were dismissed or withdrew from the program.

The current enrollment of 150 entering students annually is based on the number of faculty members within the College, the College's physical facilities as well as experiential placement capacity at appropriate clinical practice sites. In 2008, the College undertook an extensive renovation of the primary instructional auditorium, increasing student comfort and technological resources. Although actually decreasing the room capacity, student comfort is enhanced with the installation of more appropriate seating and improved audio/visual support. The off-campus instructional sites are designed to accommodate a total of 150-155 students with up to 95 students in the Grand Rapids site and up to 60 students in the Kalamazoo site. Faculty positions were added recently to ensure appropriate experiential instruction of students and maintain prescribed student:faculty ratios. The model also includes significant reliance upon adjunct faculty in addition to the added faculty positions. However, recent budgetary reallocations have reduced funding levels for support of adjunct faculty, creating uncertainty regarding the viability of the College's routine use of adjunct faculty for preceptorship of both required and elective clerkships. In addition, funding for existing open faculty positions have been reduced and it is currently uncertain if full funding will be restored to allow for appointment of faculty. Administrative restructuring within the College has been completed, creating department chair positions within both departments and eliminating the existing Department Head positions. This structure was implemented due to the elimination of the Assistant Dean/Department Head of Pharmaceutical Sciences position in 2009.

Enrollment and selection of students is controlled by the CPAC with review by the Dean. Members of the CPAC are selected by each department at the beginning of the academic year and the committee is chaired by the Assistant Dean of Student Affairs and Assessment. Application information is collected using an online application and supplemental application. PCAT scores and transcripts are also collected for each student. Using this information, a preliminary rank is established assessing PCAT score and GPA for the purposes of determining eligibility for an on-site, face-to-face interview (with extemporaneous essay). Following the interview a final rank is established using GPA (biology, chemistry, math), PCAT, interview score (including essay) and course load adjustment (e.g. course repeat penalty). Invitations for conditional admission (top 150) are then sent, along with a wait list priority number for students beyond the 150<sup>th</sup> spot. Enrollment levels are determined by the Dean in discussion with the University President and Provost. The most recent enrollment adjustment occurred in fall 2003,

with an expansion plan that called for an enrollment increase of 10 students annually for three years. That expansion is now complete, with an annual enrollment cap of 150 students.

Because communication skills are essential for success in the curriculum and the profession, a face-to-face interview has been added to the application process. The applicant interview rubric (Appendix 17.6) includes evaluation of the candidate's ability to articulate their desire to become a pharmacist, their desire to attend the College, their ability to clearly and concisely describe the use of a common device and a summative evaluation of their use of English and their speaking skills. All evaluators are trained in the use of the rubric which was developed with the assistance of the University's Director of Equal Opportunity who has expertise in recruitment/interviewing. An extemporaneous essay is also included as part of the on-site, face-to-face interview in order to assess written literacy skills.

The CPAC reviews annual data correlating pre-pharmacy admission information (math, biology, and chemistry GPA; PCAT Score) with performance in the Doctor of Pharmacy program. Regression results for the biology GPA, chemistry GPA and PCAT composite score are shown in Appendix 17.5. The data indicate that the use of the combination of pre-pharmacy biology and chemistry GPA, along with PCAT composite are predictive of performance in the program (across all students) and validate their usefulness for ranking applicants. The interview process was employed for the first time during the 2009 admission process. Continuation of the interview process will allow for inclusion of interview results in the admission formula in the most predictive manner.

As a validation of the admission process, three metrics are highlighted: 1) The rate of attrition in the program which stands at 4% overall (2004-2008 admission classes); 2) Results from the *AACP Graduate Survey* show 74.3% of graduates in 2007 and 81% of graduates in 2009 agreed or strongly agreed that the admission process for the College was well organized; and 3) NAPLEX results for recent graduates (Appendix 17.7a). FSU first-time graduates score on par with state averages and above national averages.

The applicant pool has fluctuated somewhat in recent years (Appendix 17.3 and 17.4); however, this has not led to a change in class size, nor compromised the admission requirements. The recent downturn in applicants is attributable to the implementation of a minimum PCAT score (50<sup>th</sup> percentile), discontinuation of the accelerated program, increasing pharmacy program options in the Great Lakes region and economic downturn in the state. In light of the recent reduction in applicant numbers, the College has stepped-up recruitment efforts. Further efforts specifically intended to increase minority enrollment are now under review by the College's Diversity Committee and Admission Committee.

- 3) **Comments:** Describe a) areas of the program that are noteworthy<sup>22</sup>; b) the program's assessment of its issues and its plans for addressing them with relevant timeframes; or c) findings that highlight areas of concern along with actions or recommendations to address them:

In its second year of implementation, the interview process has been conducted in an organized and deliberate manner to ensure a fair and impartial process that enhances the College's ability to identify the most appropriate applicants for admission while also providing candidates with an in-depth view of the College, its faculty and the curriculum. The interview, coupled with a sophisticated admission process relying on annual regression analysis of admission performance metrics to appropriately rank candidates based on their ability to succeed in the curriculum, has proved successful. As a summative assessment, attrition rates are consistently low throughout all four years of the program. Additionally, on the NAPLEX, graduates of the College have pass rates competitive with state averages and above the national average. In addition, the College has worked hard to maintain an extensive list of up-to-date admission guides for most 2-year and 4-year colleges and universities across the State of Michigan to assist students from urban and rural areas in pursuing a career in pharmacy.

- 4) **Quality Improvements:** Write any additional comments to further advance the quality of the program:

As a matter of routine practice, admission criteria will continue to be refined with the incorporation of face-to-face interviews and more detailed supplemental information requests. As those students move through the four-year curriculum, additional regression analysis will provide guidance for revision of the admission formula. Expanded recruitment efforts will ensure depth and diversity within the candidate pool.

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<sup>22</sup> Examples of Noteworthy Areas: A) Student services use entry and progression to improve recruitment and progression policies. B) Students with special problems are nurtured to achieve high NAPLEX scores with low attrition. C) Face-to-face interviews are used in to evaluate candidates and the program establishes inter-rater reliabilities. D) The college or school attempts to serve underserved populations and diversify the student body. E) Interviewer training is validated and standardized. F) Factors beyond GPAs play a significant role when selecting candidates.

5) **Final Evaluation:** Using your best professional judgment, evaluate how well the program meets the standard by putting a check in the appropriate box :

Meets the Standard	Partially Meets the Standard	Does Not Meet the Standard
<ul style="list-style-type: none"> <li>• The college or school provides students with comprehensive information regarding its admissions criteria and policies and procedures.</li> <li>• The college or school has low attrition combined with high NAPLEX pass rates.</li> <li>• Pre-admitted students perform on a level that's comparable to students who were not pre-admitted.</li> <li>• The diversity of student body reflects the college or school's area of service.</li> <li>• The college or school regularly assesses its criteria, policies and procedures for admission into the program.</li> <li>• Student enrollment is well managed and the dean and faculty share the final responsibility for selection and enrollment of students.</li> </ul> <p><input checked="" type="checkbox"/> Meets the Standard</p>	<ul style="list-style-type: none"> <li>• The college or school has a plan and is in the process of addressing all issues related to not meeting the requirements of this standard.</li> </ul> <p><input type="checkbox"/> Partially Meets the Standard</p>	<ul style="list-style-type: none"> <li>• Individuals outside the college or school are making decisions about enrollment.</li> <li>• Students consistently fail or have to remediate courses because of weak foundational knowledge from pre-pharmacy or poor instruction in the professional program.</li> <li>• The college or school does not assess its criteria, policies and procedures for admission into the program.</li> </ul> <p><input type="checkbox"/> Does Not Meet the Standard</p>



**Standard No. 18: Transfer of Credits and Waiver of Requisites for Admission with Advanced Standing:** The college or school must produce and make available to students and prospective students transfer credit and course-waiver policies, based on rational procedures and defensible assessments.

1) Use the checklist below to rate the program on the requirements of the standard and accompanying guidelines:

	S	N.I.
The college or school produces transfer credit and course-waiver policies, based on rational procedures and defensible assessments and makes that information available to students and prospective students.	<input checked="" type="radio"/>	<input type="radio"/>
The college or school implements policies and procedures for the evaluation of the equivalency of educational courses (preprofessional or professional) prior to admission or transfer to the professional degree program.	<input checked="" type="radio"/>	<input type="radio"/>
Requisites are only waived based upon an educationally sound assessment of the professional competencies (as set forth in Standard 12) that have been achieved through continuing pharmacy education, other postgraduate education and training, and previous pharmacy practice experience.	<input checked="" type="radio"/>	<input type="radio"/>
The college or school has established and implemented policies and procedures for students who request to transfer credits or who wish to change from one program pathway to another.	<input checked="" type="radio"/>	<input type="radio"/>
The college or school has addressed the guidelines for this standard.	<input checked="" type="radio"/>	<input type="radio"/>

2) **Describe** how the program is meeting the Standard and Guidelines. *(On average, text responses for this item, combined with text responses addressing items 3 and 4 below should not exceed 4 pages (4 pages/standard X 30 standards = 120 total text pages to address items 2,3, and 4 for each standard))*

**Pre-Pharmacy Requirements and Transfers:** A standardized course check sheet is maintained for pre-pharmacy students detailing the courses that would need to be taken to fulfill the requirements for admission to the program (See Appendix 18.1). This is updated annually based on any changes that may occur as part of the curricular revision process. Because the pre-pharmacy program continues to be maintained as a 2-year full time program, every attempt is made to try to provide a two academic year lag time for students in the pre-pharmacy pipeline. For example, when the curricular revision now being implemented was begun, the Curricular Revision Task Force addressed pre-pharmacy changes first. One of these changes was to move the two semesters of anatomy and physiology from the professional degree program to the pre-professional program. This change was approved during the 2006-2007 academic year to allow for implementation for first year pre-pharmacy students in the fall semester of 2007. This was done with an anticipated timeline for implementation of the new professional degree program in the fall semester of 2009. When an adjustment needed to be made in the microbiology prerequisites in the late stages of the curricular approval process during the 2008-2009 academic year, temporary adjustments were made in the newly developed professional curriculum to accommodate a 2-year lag for students in the pre-pharmacy curriculum.

The College also maintains admission guides for most 2-year and 4-year colleges and universities in Michigan, which clearly outline the courses that need to be taken at those institutions to meet the requirements for admission to the professional degree program. Each year, the office of the Assistant Dean of Student Affairs and Assessment is responsible for reviewing all admission guides for accuracy. Updated course catalogues for each institution are checked for accuracy of the coursework. This includes updating contact information for counselors at each institution and, if necessary, contact is made with representatives of each institution to clarify admission guide updates.

**Professional Year Transfers:** A transfer student who has attended or is currently attending another College of Pharmacy and who wishes to pursue pharmacy education at Ferris must be in good standing at that college, submit transcripts of all college courses, and have the Dean of the previously attended college provide a letter of recommendation directly to the Dean of the College. Additionally, space must be available at the appropriate class level within the College. The Admissions Committee evaluates the student's prior course work and in conjunction with the Assistant Dean of Student Affairs and Assessment develops an individualized academic plan for the completion of the College's requirements. Since the last accreditation visit, there have been no students successfully transferred into the Doctor of Pharmacy program. A number of inquiries are received each year regarding transfer policies.

A limited number of individuals with a baccalaureate in pharmacy have been admitted to a post-baccalaureate, nontraditional Pharm.D. curricular pathway. The applicant's academic credentials and experience are reviewed by the Admissions Committee. Upon successful review, course requirements are designed for each candidate. This generally consists of placement in the appropriate professional-year (often P-3) with supplemental coursework identified. Students with experiences or previous coursework that qualifies them for waiver of a required course may then petition the faculty member responsible for the course, seeking a course waiver. This process follows the University's Course Competency Assessment and Testing Policy (see Appendix 18.2) and applies to all students, regardless of program track. To date, there have been three individuals admitted to the post-baccalaureate program since conversion to the entry-level Pharm.D. degree. One individual has graduated and two individuals are currently enrolled.

Students admitted to the Pharm.D. curriculum are not allowed to adopt a part-time course schedule unless warranted by extraordinary circumstances and only with careful consideration by the Assistant Dean and others directly involved in the student's progression.

- 3) Comments:** Describe a) areas of the program that are noteworthy; b) the program's assessment of its issues and its plans for addressing them with relevant timeframes; or c) findings that highlight areas of concern along with actions or recommendations to address them:

The course waiver policy within the College adheres closely to the University policy, providing students with a clear understanding of requirements and process. Through very judicious use of waivers, the College ensures that all students meet the requirements of the curriculum. Further, with limited (almost non-existent) transfer of students into the professional curriculum, consistency among students in their knowledge base and skills is maintained.

- 4) Quality Improvements:** Write any additional comments to further advance the quality of the program:

Implementation of the 2009 curriculum has increased the level of integration within the core courses. This integration will result in improved outcomes through enhanced and more comprehensive understanding of specific topics which, it is speculated, will exceed the outcomes of the previous curricula. In addition, integration creates the potential for students to move from year-to-year with greater "connectivity" and much less demarcation between the years. As a result, there is discussion underway to close the non-traditional, post-BS Pharm.D. degree.

5) **Final Evaluation:** Using your best professional judgment, evaluate how well the program meets the standard by putting a check in the appropriate box :

Meets the Standard	Partially Meets the Standard	Does Not Meet the Standard
<ul style="list-style-type: none"> <li>• The college or school has and makes available, transfer of credit and course-waiver policies that are based on rational procedures and defensible assessments.</li> <li>• Policies are correlated with student results.</li> </ul>	<ul style="list-style-type: none"> <li>• The college or school has a plan and is in the process of addressing all issues related to not meeting the requirements of this standard.</li> </ul>	<ul style="list-style-type: none"> <li>• A high number of individuals complain that transfer credits or course waivers are not being accepted or granted.</li> <li>• The college or school has no policies or applies them arbitrarily.</li> <li>• The college or school does not assess its policies relative to outcomes.</li> </ul>
<input checked="" type="checkbox"/> <b>Meets the Standard</b>	<input type="checkbox"/> <b>Partially Meets the Standard</b>	<input type="checkbox"/> <b>Does Not Meet the Standard</b>

**Standard No. 19: Progression of Students:** The college or school must produce and make available to students and prospective students criteria, policies, and procedures for academic progression, academic probation, remediation, missed course work or credit, dismissal, readmission, rights to due process, and appeal mechanisms.

1) Use the checklist below to rate the program on the requirements of the standard and accompanying guidelines:

	S	N.I.
The college or school produces and makes available to students and prospective students criteria, policies, and procedures for academic progression, academic probation, remediation, missed course work or credit, dismissal, readmission, rights to due process, and appeal mechanisms.	<input checked="" type="radio"/>	<input type="radio"/>
The college or school's system of monitoring student performance based on formative assessments of learning outcomes provides for the early detection of academic difficulty.	<input checked="" type="radio"/>	<input type="radio"/>
The college or school ensures that all students have a comparable system of access to individualized student services such as tutoring and faculty advising. N/A (single pathway) <input checked="" type="checkbox"/>	<input type="radio"/>	<input type="radio"/>
The college or school has addressed the guidelines for this standard.	<input checked="" type="radio"/>	<input type="radio"/>

- 2) **Describe** how the program is meeting the Standard and Guidelines. *(On average, text responses for this item, combined with text responses addressing items 3 and 4 below should not exceed 4 pages (4 pages/standard X 30 standards = 120 total text pages to address items 2,3, and 4 for each standard)*

The Progressions and Academic Standards Committee is responsible for establishing and enforcing policies related to progressions and academic standards and for addressing individual student cases. It is chaired by the Assistant Dean of Student Affairs and Assessment and includes faculty representation from each department of the College. The committee reviews and approves policies that outline the rules that students must follow in order to proceed through the curriculum before graduation. The College and University academic progression policies and standards are reviewed with students during the orientation and are available online for students to use as a reference. In recent years, the College has increased its emphasis on reviewing these policies during the orientation program. In addition, the policies have been more clearly delineated in the Student Handbook, which is available on the College website at:

<http://www.ferris.edu/htmls/colleges/pharmacy/Editor/Files/Student-Handbook-2009-Fall.pdf>.

Comprehensive dissemination of this information to students is evidenced by 94.7% (2008) and 96.6% (2009) of graduates surveyed strongly agreeing or agreeing that they were aware of expected behaviors with respect to professional and academic conduct.

The Doctor of Pharmacy curriculum is designed for the sequential development of knowledge, skills and attitudes essential for practice as a pharmacist. Courses follow a progression through each year of the curriculum, each building upon concepts established in previous courses. The majority of students progress through the curriculum successfully, strengthening their academic skills and becoming independent learners. In the event academic difficulty is encountered, the policies outlined below are followed. These policies represent the judicious combination of academic rigor, respect for the curricular integrity, professional expectations and the students' interest.

1. Pharmacy 2.00 Rule:
  - a. A student must have a 2.00 GPA at the end of the 1<sup>st</sup>, 2<sup>nd</sup> and 3<sup>rd</sup> professional years in order to proceed in the curriculum.
    - i. This is defined as a pharmacy cumulative GPA (all professional courses including English 321/421).
    - ii. Only the first two pharmacy electives will be counted.
    - iii. Electives taken in the P1 year will not count towards the first year GPA.
  - b. Before Graduation, the Pharmacy Cumulative GPA must be equal or greater than 2.00.
  - c. The future progress of a pharmacy student who fails to meet the conditions of this rule will be determined by the ADSAA and the Progressions and Academic Standards Committee of the College.

2. Dismissal: A student shall be academically dismissed from the College whenever one of the following conditions is met:

- a. Failure to earn a 1.25 or greater Pharmacy cumulative GPA after the first two semesters of the pharmacy program.
- b. Failure in 50 percent (50%) or more credit hours in ANY semester.
- c. Failure of any professional pharmacy course twice.
- d. Failure of any two Advanced Pharmacy Practice Experiences.
- e. Failure to meet the conditions set by the ADSAA.

At the end of each semester, course grades are reviewed by the Office of the ADSAA and the Director of Campus Student Services (DOCSS). Transcripts are checked for academic progression of each student in the program. A check sheet is maintained and updated for each student in his or her file. In addition, each student's transcript is checked for violations of the progression rules outlined above. The status of each student in the program is updated and a list is maintained of all students who have not progressed or who have been dismissed or withdrawn from the program. Students who violate progression rules as outlined above are sent a letter of dismissal, which includes references to the appeals process in the Student Handbook. All automatic dismissals (as outlined above) are subsequently reviewed with the Progressions Committee. Appendix 19.1 outlines student attrition for the 2004-2009 entering classes. The presence of the accelerator program has allowed multiple opportunities for students to remediate coursework and progress within a semester or two of a failed course (for the first two professional years of the program). With the implementation of the 2009 curriculum, plans are underway for summer remediation options that would allow students a second opportunity to repeat courses failed in the first two professional years of the program.

Students are issued letter grades in most courses in the curriculum. Students in professional years 1 and 2 who are in academic difficulty (as defined by a cumulative GPA of less than 2.0) are required to meet with the ADSAA during the next semester. During these academic counseling sessions, an attempt is made to determine the source of the difficulty and advice is given to assist students with their academic performance. Advice may include reducing working hours, obtaining free tutoring from the University's Academic Support Center, obtaining personal counseling from the University's Counseling Center, or obtaining medical advice from the Birkam Health Center. Current policies are also reviewed and curricular options are explored. A written summary of the conversation is recorded and retained in the student's file. If appropriate, a copy is provided to the student and one is sent to his/her advisor, ensuring appropriate faculty-based counseling should the student seek additional assistance. Approximately 26% of students responded in the *2009 Graduate Survey* (down from 33% in 2008 survey) that they were unable to comment on the extent to which the College effectively managed *academic* misconduct. For those

students who felt they could comment, 77% strongly agreed or agreed that the College effectively managed academic misconduct. Eighty-five percent (85%) of graduates agreed with this statement in the 2008 survey.

Students of the College are expected to follow all policies of the University as outlined in the University's Student Handbook. These policies address violations involving cheating, fabrication, plagiarism, academic misconduct, threatening/harassment, interference, and breaches of professional decorum or confidentiality. In addition, students are expected to comply with specific College standards and policies included in the Student Handbook, the Experiential Manual and the Clinical Passport Policies in dealing with fellow students, faculty, clinicians and patients. If a student violates any of the University or College policies or guidelines in any course work contained in the curriculum, the incident is dealt with as per the course syllabus and then is reported to the Progressions Committee on the Academic/Professional Misconduct form. Upon investigation of the incident, the Progressions Committee may take further action including: dismissal from the course for the remainder of the semester (issuance of a failing grade for the course) or dismissal from the College. Further, a violation of any of the policies or guidelines outside of a specific course may also result in dismissal from the College. The Progressions Committee meets to consider cases involving policy and guideline violations. If the Committee determines that termination from the College is warranted, a recommendation is made to the Assistant Dean of Student Affairs and Assessment and the Executive Committee.

The student may appeal dismissal or actions taken for academic or professional conduct reasons to the Progressions Committee in writing. The Progressions Committee deliberates on the appeal and makes a recommendation for denial or reinstatement to the ADSAA and Assessment and the Executive Committee. The Executive Committee may overturn the recommendation of the Progressions Committee. If so, the Executive Committee will inform the Progressions Committee of the reason for the decision. If the appeal is denied, the student may appeal the decision directly to the Dean of the College. The Dean's decision is final. Approximately 24% of students responded in the *2009 Graduate Survey* (down from 33% in 2008 survey) that they were unable to comment on the extent to which the College effectively managed *professional* misconduct. For those students who felt they could comment, 73% strongly agreed or agreed that the College effectively managed professional misconduct. Seventy-six percent (76%) of graduates agreed with this statement in the 2008 survey.

Upon entry to the College, each student is assigned a faculty advisor. The student meets with the faculty advisor during the P1 orientation, which helps to establish a rapport between them. Students are encouraged to contact their advisor when they encounter questions or difficulties in the program. In recent graduate surveys (2008 and 2009) approximately 55% of students responded that they agreed that the academic advising met their needs. In response to this, the orientation program has been expanded to increase the information on introductory and



advance experiences, academic advising and common progression issues, transitioning to the College and university and college procedures.

- 3) **Comments:** Describe a) areas of the program that are noteworthy<sup>23</sup>; b) the program's assessment of its issues and its plans for addressing them with relevant timeframes; or c) findings that highlight areas of concern along with actions or recommendations to address them:

It is noteworthy that through the use of the accelerator program, students have been provided with remediation options in the first two years of the program that allow them to correct deficiencies in credit hours caused by course failures. With the implementation of the 2009 curriculum (which eliminates the accelerator program), the faculty are working on a summer remediation program that would allow students to stay on pace with their entering class.

Faculty representation on the Progressions Committee has improved communication regarding the status of students who have failed to meet the progression rules of the College. This is demonstrated by the results of the *2007 Faculty Survey*, which showed that 53.4% of the faculty disagreed that the College effectively managed poor academic conduct on the part of students. This improved to only 38.1% of faculty disagreeing that the College effectively managed poor academic conduct in the 2009 survey. This is in contrast to only 9.7% (2008) and 17.2% (2009) of graduates disagreeing or strongly disagreeing that the College effectively managed poor academic conduct in surveys.

- 4) **Quality Improvements:** Write any additional comments to further advance the quality of the program:
- 5) **Final Evaluation:** Using your best professional judgment, evaluate how well the program meets the standard by putting a check in the appropriate box :

Meets the Standard	Partially Meets the Standard	Does Not Meet the Standard
<ul style="list-style-type: none"> <li>• The college or school has progression policies that are known and used.</li> <li>• The college or school makes programmatic adjustments for quality improvement based on progression data.</li> <li>• Systems are in place for the early detection of academic difficulties and provision of appropriate remediation.</li> </ul>	<ul style="list-style-type: none"> <li>• The college or school is in the process of revising or developing its progression policies and there is evidence that they will be implemented.</li> </ul>	<ul style="list-style-type: none"> <li>• The college or school has high attrition (greater than 5%).</li> <li>• Progression policies do not exist, are not known, are not used, are lenient or are applied inconsistently.</li> <li>• Students describe or data indicate excessive problems with academic progression.</li> <li>• Students do not know about procedures for making appeals or for due process.</li> </ul>
<input checked="" type="checkbox"/> Meets the Standard	<input type="checkbox"/> Partially Meets the Standard	<input type="checkbox"/> Does Not Meet the Standard

<sup>23</sup> Examples of Noteworthy Areas: A) Any past progression problems were found, corrected and prevented from recurring. B) Student progression is included as part of the evaluation plan.

**Standard No. 20: Student Complaints Policy:** The college or school must produce and make available to students a complaints policy that includes procedures to be followed in the event of a written complaint related to one of the accreditation standards, student rights to due process, and appeal mechanisms. Students must receive information on how they can submit a complaint to ACPE for unresolved issues on a complaint related to the accreditation standards.<sup>24</sup>

1) Use the checklist below to rate the program on the requirements of the standard and accompanying guidelines:

	S	N.I.
The college or school produces and makes available to students a complaints policy that includes procedures to be followed in the event of a written complaint related to one of the accreditation standards, student rights to due process, and appeal mechanisms.	●	○
Students receive information on how they can submit a complaint to ACPE for unresolved issues on a complaint related to the accreditation standards. <sup>25</sup>	●	○
The college or school includes information about the complaint policy during student orientation.	●	○
The college or school maintains a chronological record of student complaints related to matters covered by the accreditation standards and allows inspection of the records during on-site evaluation visits by ACPE.	●	○
The college or school informs ACPE during an on-site evaluation if any of the student complaints related to the accreditation standards have led to legal proceedings, and the outcomes of such proceedings.	●	○
The college or school has addressed the guidelines for this standard.	●	○

<sup>24</sup> Refer also to ACPE Complaints Policy at <http://www.acpe-accredit.org/complaints/default.asp>

<sup>25</sup> Refer also to ACPE Complaints Policy at <http://www.acpe-accredit.org/complaints/default.asp>

2) **Describe** how the program is meeting the Standard and Guidelines. *(On average, text responses for this item, combined with text responses addressing items 3 and 4 below should not exceed 4 pages (4 pages/standard X 30 standards = 120 total text pages to address items 2,3, and 4 for each standard))*

The College maintains a complaint policy in the student handbook (<http://www.ferris.edu/htmls/colleges/pharmacy/Editor/Files/Student-Handbook-2009-Fall.pdf>). The policy outlines the procedures that students should follow in the event of a concern related to course or course grades, non-course related concerns, questions related to immunizations or criminal background checks, and experiential and ACPE-related concerns. The policy outlines the following:

1. **Complaints or Concerns Related to a Course or Course Grade:** If you have a complaint or concern regarding a course policy or course grade it is important to first discuss this with the instructor or course coordinator. Because some courses are taught by a team of faculty, the course coordinator serves as the person responsible for the syllabus and policies. If the student does not receive a satisfactory response to their concern, they may address it with the following in order:

- a. Department Head or Department Chair
- b. Assistant Dean of Student Affairs and Assessment
- c. Associate Dean/Dean of the COP

2. **Non-Course Related Concerns or Complaints (e.g. Student Services; On-Campus or Off-Campus Services, etc.):**

- a. On-Campus: Office of the Assistant Dean of Student Affairs and Assessment
- b. Off-Campus: Director of Off-Campus Student Services
- c. If the College representative is unable to address the issue, or it is not addressed to the student's

satisfaction, then the student will be directed to the appropriate University office or personnel who can address the issue further (e.g., Academic Affairs, Housing, Financial Aid, Student Judicial Services, etc.).

3. **Questions or Concerns Related to Immunization or Criminal Background Checks/Drug Testing (Clinical Passport):** These questions should be directed to the Director of External Clinical Operations

4. **Experiential Coursework (Introductory or Advanced)**

- a. Introductory Experientials:
  - b. Experiential Team Members
    - i. Practicum Director or Assistant Dean of Student Affairs and Assessment
    - ii. Associate Dean of Pharmacy
  - c. Advance Experientials:
    - i. Experiential Team Members

- ii. Experiential Coordinator
- iii. Associate Dean of Pharmacy

5. Concerns or Grievances Regarding Standards and/or Policies and Procedures of the Accreditation Council for Pharmacy Education (ACPE): Students who wish to file a complaint related to the accreditation standards shall submit the complaint in writing to: ACPE Executive Director, ACPE, at: [csinfo@acpe-accredit.org](mailto:csinfo@acpe-accredit.org). Complaints must identify the specific standard(s) that is not being adhered to and include evidence to support the complaint. For additional information regarding ACPE complaint procedures, please see: <http://www.acpe-accredit.org/students/complaints.asp>.

In the past, this policy was reviewed with students during the one-day orientation program (through entering class of 2008). The one-day orientation was felt to be too short to cover all of the information necessary for students. This was evidenced by only 58.6% of students strongly agreeing or agreeing with the statement that they were aware of the process for raising issues or concerns with the College/school administration. With the implementation of the 2009 curriculum (entering class of Fall 2009), the College implemented a more extensive orientation program intended to provide more comprehensive information on transition to pharmacy school, early and advanced experiential scheduling, student services, progression and complaint policies, CPR training and clinical passport requirements. During this revised orientation program the ADSAA reviews the Student Handbook including the section on the complaint policy. In addition, the complaint policy and its online location are reviewed at the off-campus orientation programs in Grand Rapids and Kalamazoo for students entering the 3<sup>rd</sup> professional year.

In order to gather input from students, additional mechanisms have been developed to solicit student input and comment. With the implementation of the 2009 Curriculum, the ADSAA scheduled open forums for P1 students. These sessions were helpful and provided valuable assessments of the new curriculum's course content. This will be continued into P2 in the 2010-2011 academic year. Routinely in P3, the Student Advisory Board (SAB) is convened by the DOCSS at both instructional sites. This group of student volunteers provides informal assessments of the semester's progress, student issues and course content/delivery. Significant findings from this group are then presented to the ADSAA and the Associate Dean for discussion and action. In addition, the course coordinators for the Pharmacotherapeutics and Integrated Lab course conduct forums for all students enrolled in the course. These sessions, scheduled once each semester, are used to further explain course policies and the respond to student concerns.

- 3) **Comments:** Describe a) areas of the program that are noteworthy<sup>26</sup>; b) the program's assessment of its issues and its plans for addressing them with relevant timeframes; or c) findings that highlight areas of concern along with actions or recommendations to address them:

The College does not rely solely on the complaint policy to elicit student complaints and concerns. The College also maintains a Dean's Advisory Board (DAB), the SAB, and the Review Forums for the Pharmacotherapy and Integrated Lab courses. . The DAB is made up of student representatives from different organizations, along with class officers, to provide information and feedback to the Dean of the College. The DAB also serves as a resource for passing along issues and concerns. In addition, student forums are offered in Grand Rapids and Kalamazoo for students to have an opportunity to ask questions, express concerns and offer suggestions regarding coursework. The College maintains a log of significant complaints received by students. Complaints are forwarded to the appropriate faculty, course coordinators or staff for follow-up. The log includes the date, complaint and follow-up. Complaints that reach the level of the Dean are also provided to the Provost's office.

- 4) **Quality Improvements:** Write any additional comments to further advance the quality of the program:

- 5) **Final Evaluation:** Using your best professional judgment, evaluate how well the program meets the standard by putting a check in the appropriate box :

Meets the Standard	Partially Meets the Standard	Does Not Meet the Standard
<ul style="list-style-type: none"> <li>• A complaints policy exists, is clearly articulated in the student handbook, and is followed.</li> <li>• All complaints are documented and resolved within college or school or university procedures.</li> <li>• Complaints end after the issue is identified and addressed.</li> <li>• Students are aware of the college or school's complaints policy and how to submit a complaint to ACPE if it is not resolved by the college or school.</li> </ul> <p><input checked="" type="checkbox"/> <b>Meets the Standard</b></p>	<ul style="list-style-type: none"> <li>• The college or school is in the process of revising or developing its complaints policy and there is evidence that it will be implemented.</li> <li>• The college or school has a plan and is in the process of addressing all issues related to not meeting the requirements of this standard.</li> </ul> <p><input type="checkbox"/> <b>Partially Meets the Standard</b></p>	<ul style="list-style-type: none"> <li>• A high volume of complaints is sent to ACPE indicating that issues are not being addressed or the on-site evaluation reveals problems not addressed in the self-study or interim reports.</li> <li>• Students state that they do not know how to voice complaints or that an appeal process exists.</li> <li>• Students routinely go outside the complaints process to resolve problems (e.g. bypass prescribed channels or go to litigation).</li> <li>• No complaints policy exists.</li> </ul> <p><input type="checkbox"/> <b>Does Not Meet the Standard</b></p>

<sup>26</sup> Examples of Noteworthy Areas: A) Complaints are well received and resolved rapidly. B) The complaint process involves students. C) Students speak positively about the process. D) Students are informed of the outcome of their complaint and resulting changes, if any, at the college or school.

**Standard No. 21: Program Information:** The college or school must produce and make available to students and prospective students a complete and accurate description of the professional degree program, including its current accreditation status.

1) Use the checklist below to rate the program on the requirements of the standard and accompanying guidelines:

	S	N.I.
The college or school produces and makes available to students and prospective students a complete and accurate description of the professional degree program, including its current accreditation status.	<input checked="" type="radio"/>	<input type="radio"/>
Admissions policies, procedures, and practices fully and clearly represent the conditions and requirements related to distance learning, including full disclosure of any requirements that cannot be completed at a distance. N/A (no distance pathways) <input checked="" type="checkbox"/>	<input type="radio"/>	<input type="radio"/>
The college or school has addressed the guidelines for this standard.	<input checked="" type="radio"/>	<input type="radio"/>

2) **Describe** how the program is meeting the Standard and Guidelines. (On average, text responses for this item, combined with text responses addressing items 3 and 4 below should not exceed 4 pages (4 pages/standard X 30 standards = 120 total text pages to address items 2,3, and 4 for each standard)

For the entering class of Fall 2009 a curriculum revision was implemented in response to the updated accreditation standards. Prior to the completion of the professional program curricular revision, the pre-pharmacy requirements were introduced and approved during the 2006-2007 academic year. Once approved, the changes in the pre-pharmacy curriculum were disseminated through the pre-pharmacy advisors, updated on the College website and disseminated to other colleges and universities in the state through the use of the transfer guides. As previously discussed, the transfer guides provide a college-by-college outline for State of Michigan institutions listing the courses that need to be taken to fulfill the pre-pharmacy requirements. The College maintains information on its website that includes: Student Handbooks (2008 entering class and before, 2009 entering class); admission policies and criteria; and existing and revised curriculum. The revised curriculum is also posted on the university site as part of the [official catalog](#). Information regarding the accreditation status is also maintained on the College website. Approximately two-thirds of graduates in the *AACP Graduate Survey* (2008 – 69%; 2009 2009 – 67.2%) SA/A that the College provided timely information about news, events and important matters.

The College expanded the orientation program for the incoming class of Fall 2009. The orientation includes information on transitioning to pharmacy school, early and advanced experiential scheduling, student services, progression and complaint policies, CPR training and the clinical passport requirements. As part of the Fall 2009 orientation, the curricular revision was discussed and specific changes in each year of the program were explained.

Relevant Hyperlinks:

University Curriculum Committee proposal for pre-pharmacy changes.	<a href="http://www.ferris.edu/htmls/administration/academicaffairs/vpoffice/senate/univcurcomm/pharmdentreq.pdf">http://www.ferris.edu/htmls/administration/academicaffairs/vpoffice/senate/univcurcomm/pharmdentreq.pdf</a>
College of Pharmacy applicant website for transfer guides on pre-pharmacy coursework.	<a href="http://www.ferris.edu/htmls/colleges/pharmacy/link_desc.cfm?LinkID=28">http://www.ferris.edu/htmls/colleges/pharmacy/link_desc.cfm?LinkID=28</a>
College of Pharmacy website page on admissions with reference to pre-pharmacy requirements.	<a href="http://www.ferris.edu/htmls/colleges/pharmacy/link_desc.cfm?LinkID=2">http://www.ferris.edu/htmls/colleges/pharmacy/link_desc.cfm?LinkID=2</a>
College of Pharmacy website page for student information on handbook, curriculum, etc.	<a href="http://www.ferris.edu/htmls/colleges/pharmacy/link_desc.cfm?LinkID=10">http://www.ferris.edu/htmls/colleges/pharmacy/link_desc.cfm?LinkID=10</a>
Admissions Policies	<a href="http://www.ferris.edu/htmls/colleges/pharmacy/link_desc.cfm?LinkID=59">http://www.ferris.edu/htmls/colleges/pharmacy/link_desc.cfm?LinkID=59</a>
University Catalog for Doctor of Pharmacy Degree	<a href="http://catalog.ferris.edu/programs/220/">http://catalog.ferris.edu/programs/220/</a>

3) **Comments:** Describe a) areas of the program that are noteworthy<sup>27</sup>; b) the program's assessment of its issues and its plans for addressing them with relevant timeframes; or c) findings that highlight areas of concern along with actions or recommendations to address them:

4) **Quality Improvements:** Write any additional comments to further advance the quality of the program:

<sup>27</sup> Examples of Noteworthy Areas: A) Students are well informed about the program. B) The college or school has a process for continually updating students through face-to-face meetings and in print. C) Information is relevant and easy to access.



5) **Final Evaluation:** Using your best professional judgment, evaluate how well the program meets the standard by putting a check in the appropriate box :

Meets the Standard	Partially Meets the Standard	Does Not Meet the Standard
<ul style="list-style-type: none"> <li>• Comprehensive and accurate program information is made available to current and prospective students.</li> <li>• The accreditation status of the college or school is accurately represented.</li> </ul>	<ul style="list-style-type: none"> <li>• Information is adequate and well-communicated, but minor elements are missing, not current or inaccurate.</li> <li>• The college or school has a plan and is in the process of addressing all issues related to not meeting the requirements of this standard.</li> </ul>	<ul style="list-style-type: none"> <li>• Basic information is missing, misleading or out of date.</li> <li>• Evidence exists that students are not fully informed about the program.</li> </ul>
<input checked="" type="checkbox"/> <b>Meets the Standard</b>	<input type="checkbox"/> <b>Partially Meets the Standard</b>	<input type="checkbox"/> <b>Does Not Meet the Standard</b>

**Standard No. 22: Student Representation and Perspectives:** The college or school must consider student perspectives and include student representation, where appropriate, on committees, in policy-development bodies, and in assessment and evaluation activities.

1) Use the checklist below to rate the program on the requirements of the standard and accompanying guidelines:

	S	N.I.
The college or school considers student perspectives and includes student representation, where appropriate, on committees, in policy-development bodies, and in assessment and evaluation activities.	<input checked="" type="radio"/>	<input type="radio"/>
The college or school involves student representatives on appropriate program committees, as well as in accreditation self-studies and strategic planning activities.	<input checked="" type="radio"/>	<input type="radio"/>
The pharmacy students feel their perspectives are heard, respected, and acted upon in a fair and just manner.	<input type="radio"/>	<input checked="" type="radio"/>
The college or school has addressed the guidelines for this standard.	<input checked="" type="radio"/>	<input type="radio"/>

2) **Describe** how the program is meeting the Standard and Guidelines. *(On average, text responses for this item, combined with text responses addressing items 3 and 4 below should not exceed 4 pages (4 pages/standard X 30 standards = 120 total text pages to address items 2,3, and 4 for each standard)*

Students are represented on the Admissions Committee (responsible for admissions criteria, policies and procedures), Curriculum Committee (responsible for curriculum review and approval and policies and procedures), and the Diversity Committee. The Diversity Committee was recently formed to increase awareness regarding issues of diversity and how they affect the learning environment in the College. In addition, committee goals include improving recruitment efforts to help insure a diverse student body and faculty in the College. Student representatives were also included on the Curricular Revision Task Force, which was charged with the responsibility of updating the Doctor of Pharmacy curriculum in response to the recent accreditation standards changes.

The Dean of the College also utilizes the Dean's Advisory Board (DAB), which includes presidents from each of the student professional organizations, class presidents from P1 and P2, and student representatives from the Admissions Committee and Curriculum Committee. The purpose of this group is to provide direct feedback on issues and concerns to the Dean, along with follow-up on questions and news. This group meets approximately monthly each semester. Similarly the DOCSS utilizes the SAB to obtain feedback from students in the P3 and P4 years.

The Director of Off-Campus Student Services coordinates the Student Advisory Board (SAB), which is a committee of students in Grand Rapids and Kalamazoo. These students volunteer to meet on a monthly basis to discuss issues of importance to the students as well as offer feedback and suggestions regarding off-campus student services. The Board was formed to help improve communication for the off-campus sites. This group provides feedback, concerns, complaints and updates on important issues. Examples of improvements originating from SAB meetings:

- Created a web-based College-wide system in BlackBoard (Pharmacy 4-1-1) for improved communication among three instructional sites and across all years of the professional program;
- Arranged opportunities for underclassmen to speak with upperclassmen about upcoming years;
- Posted surveys for student feedback on specific issues as needed (i.e. F08 changes in Pharmacotherapeutics), input from College Day and P-1 orientation.
- Developed College timeline to help students anticipate upcoming requirements for each year (non-accelerators and accelerators);
- Requested faculty biographies to make available to students;
- Suggested building improvements, improved Internet access, classroom temperature control, additional trash receptacles and power strips; and

- Coordinated Angel Tree gift projects for the underprivileged.

In addition to the monthly SAB meetings, student forums are offered in Grand Rapids and Kalamazoo for students to have an opportunity to ask questions and offer suggestions regarding the Pharmacotherapeutics course sequence and Integrated Lab courses. Faculty members, including course coordinators, facilitate these meetings. In addition the Therapeutics and Integrated Lab Task Force was formed comprised of students and faculty to address these courses on an ongoing basis.

The Director of Off-Campus Student Services also coordinates the Advisory Council. The Advisory Council was formed in response to faculty and student concerns that as students transitioned from the 2<sup>nd</sup> professional year to the 3<sup>rd</sup> and 4<sup>th</sup> professional years of the program, there was a drop-off in participation in student organizations. The Advisory Council is comprised of faculty and student representatives from the student professional organizations. Its purpose is to increase participation in the student organizations and improve communication as students transition to the off-campus sites.

In the *2008 Graduate Survey*, 52.2% of graduates SA/A that the College administration responded to problems and issues of concern to the student body. This improved modestly to 60% of students in the 2009 survey who SA/A that their concerns were being addressed. Of those students responding, 58.6% (*2009 Graduate Survey*) stated they were aware of the process for raising issues with the College's administration (up from 51% in 2008). However, 82.8% of students in the *2009 Graduate Survey* (86.7% in 2008) SA/A that they were aware that student representatives served on College committees with responsibility for curricular or other matters. In addition, 75.8% of students in the *2009 Graduate Survey* (79.6% in 2008) strongly agreed or agreed that the College made use of a variety of means to obtain student perspectives on the curriculum, student services, faculty student relationships and other aspects of the program.

- 3) **Comments:** Describe a) areas of the program that are noteworthy<sup>28</sup>; b) the program's assessment of its issues and its plans for addressing them with relevant timeframes; or c) findings that highlight areas of concern along with actions or recommendations to address them:

It is noteworthy that approximately 75% of students understand that the College uses a variety of means to solicit feedback from students and that approximately 80-85% of students are aware that there is student representation on important College committees. The College has continued to try to address the gap that exists between these numbers and the percentage of students who feel their concerns are being addressed. The Student Advisory Board, Therapeutics and Integrated Lab Task Force, and Dean's Advisory Board were created to provide a forum for students to voice their concerns and provide feedback to key decision makers in the College.

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<sup>28</sup> Examples of Noteworthy Areas: A) Students perspectives are a major driver of policy assessment activities. B) Multiple approaches (e.g., meetings, focus groups, surveys) are used to gather student perspectives. C) The college or school responds to student issues and provides feedback regardless of whether changes are enacted.

4) **Quality Improvements:** Write any additional comments to further advance the quality of the program:

The Assessment Committee has noted that in the *2009 Graduate Survey*, only 53% of graduates SA/A that their student government effectively communicated student opinions and perspectives to the faculty or administration (down from 68% in the 2008 survey). This was reviewed with some of the student representatives and was felt to be attributable to some issues specific to that class regarding how some of the late program functions (e.g. senior banquet, hooding ceremony, etc.) were organized and open student involvement in class officer meetings. In response, improved communications between administration, class officers and students (e.g. regular class meetings, improved use of Pharmacy 4-1-1) are under review.

5) **Final Evaluation:** Using your best professional judgment, evaluate how well the program meets the standard by putting a check in the appropriate box :

Meets the Standard	Partially Meets the Standard	Does Not Meet the Standard
<ul style="list-style-type: none"> <li>• Students are appointed to appropriate committees.</li> <li>• Mechanisms are in place and efforts are made to solicit student opinions.</li> <li>• Students at any distance campuses feel integrated into the program and are equitably represented.</li> <li>• Students indicate that the program is responsive to their needs.</li> <li>• An effective student government is in place.</li> </ul>	<ul style="list-style-type: none"> <li>• Students are appointed to committees, but they do not attend in spite of the college or school's efforts.</li> <li>• The college or school is in the process of revising or developing its system of student government and there is evidence that it will be implemented.</li> <li>• The college or school has a plan and is in the process of addressing all issues related to not meeting the requirements of this standard.</li> </ul>	<ul style="list-style-type: none"> <li>• Students are not appointed to committees.</li> <li>• No effort is made to solicit student opinions.</li> <li>• Students indicate the college or school is unresponsive to their issues.</li> <li>• No system of student government is present.</li> </ul>
<input checked="" type="checkbox"/> <b>Meets the Standard</b>	<input type="checkbox"/> <b>Partially Meets the Standard</b>	<input type="checkbox"/> <b>Does Not Meet the Standard</b>

**Standard No. 23: Professional Behavior and Harmonious Relationships:** The college or school must provide an environment and culture that promotes professional behavior and harmonious relationships among students, faculty, administrators, preceptors, and staff. Faculty, administrators, preceptors, and staff must be committed to developing professionalism and fostering leadership in students and to serving as mentors and positive role models for students.

1) Use the checklist below to rate the program on the requirements of the standard and accompanying guidelines:

	S	N.I.
The college or school provides an environment and culture that promotes professional behavior and harmonious relationships among students, faculty, administrators, preceptors, and staff.	●	○
Faculty, administrators, preceptors, and staff are committed to developing professionalism and fostering leadership in students and to serving as mentors and positive role models for students.	●	○
The college or school develops, via a broadly based process, a policy consistent with university policies on student, faculty, preceptor, and staff professionalism that defines expected behaviors and consequences for deviation from the policy, as well as due process for appeals.	●	○
The activities undertaken by the college or school to promote professional behavior are effective.	●	○
The activities undertaken by the college or school to promote harmonious relationships are effective.	●	○
The activities undertaken by the college or school to promote student mentoring and leadership development are effective.	●	○
Faculty receive adequate support from peers.	●	○
The college or school supports students, faculty, administrators, preceptors, and staff participation, where appropriate, in pharmacy, scientific and other professional organizations.	●	○
The college or school has addressed the guidelines for this standard.	●	○

2) **Describe** how the program is meeting the Standard and Guidelines. (On average, text responses for this item, combined with text responses addressing items 3 and 4 below should not exceed 4 pages (4 pages/standard X 30 standards = 120 total text pages to address items 2,3, and 4 for each standard)

The College utilizes and makes reference to the University's definitions of academic and personal misconduct acts in the *College Student Handbook* at:

<http://www.ferris.edu/htmls/administration/StudentAffairs/Studenthandbook/>.

In addition to outlining student expectations relative to the university handbook, the *College of Pharmacy Student Handbook* provides additional guidance to students on classroom attendance and absences, attendance at professional meetings, professionalism, dress code in each year of the professional degree program, use of cell phones, and college-specific actions for academic/personal misconduct. Academic/professional misconduct violations are reported using an Incident Reporting Form that can be found at the end of the College of Pharmacy Student Handbook. Upon investigation of the incident, the student may receive a grade penalty, be dismissed from the course for the remainder of the semester, receive a failing grade for the course and/or may be dismissed from the College. Further, a violation of any of the policies or guidelines outside of a specific course may also result in dismissal from the College. The Progressions Committee meets to consider cases involving guidelines violations. If the Committee determines that termination from the College is warranted, the ADSAA will notify the student. The student may appeal the Committee's decision in writing. If the appeal is denied, the student may appeal the decision to the College Dean. The Dean's decision is final. If, based on the appeal, the student is reinstated, the Assistant Dean of Student Affairs and Assessment in consultation with the Progressions Committee will determine appropriate coursework that must be successfully completed for continuation in the College.

In addition to the student handbooks, the College orientation program has expanded to provide more time to discuss academic/professional misconduct policies, as well as standards for professional behavior. In the *2008 Graduate Survey*, 94.7% of students (96.6% in *2009 Graduate Survey*) SA/A that they were aware of expected behaviors with respect to professional and academic conduct. This is validated in the *Alumni Survey* (2008) with 86.6% of alumni SA/A that when they were students, the College provided an environment and culture that promoted professional behavior and harmonious relationships among students, faculty, administrators, preceptors and staff.

In summer of 2009, the College formed a Professionalism Task Force. The Professionalism Task Force includes the DOCSS, faculty representatives from each of the departments and 3 student representatives. The task force was formed in response to faculty concerns regarding student professionalism, as well as student concerns regarding unprofessional behavior among students both verbally and on message boards in the web-based Pharmacy 4-1-1 system. Although 85.7% of respondents in the *2009 Faculty Survey* (80% in 2007) SA/A that the college provided an environment and culture that promotes professional behavior, 43.3% disagreed (2007) that the college effectively *managed professional* misconduct. In addition, 30% disagreed (2007) that the college effectively

*managed academic* misconduct. The task force recently completed a revision of the dress codes for each of the professional years of the program. It is currently working on updating the code of conduct in the student manual, professionalism assignments that can be embedded throughout the program and a discussion board usage policy. In the *2009 Faculty Survey* there was improvement with only 9.5% of respondents disagreeing that the College effectively manages professional misconduct and 19% disagreeing that the College effectively manages academic misconduct. The Professionalism Task Force continues to provide faculty with a forum to update and address issues of student professional misconduct.

Students also seem to perceive that the college is managing academic and professional misconduct as evidenced by the *2009 AACP Graduate Survey*. Only 8.6% of students (9.7% in 2008) disagreed that the college effectively managed academic misconduct, and 10.3% of students (15.9% in 2008) disagreed that the college effectively managed professional misconduct. As discussed in Section 22, the College employs a number of different methods to receive student input that impacts policies on student professionalism. Orientation programs are also conducted as students transition to the P3 and P4, providing a forum to meet with faculty and preceptors, and outline expectations for students regarding professional conduct, dress, absences, communication and plagiarism. P3 and P4 students also present information to incoming students regarding expected behavior in the classroom and on rotations. Measures of student professionalism and behavior are also incorporated into introductory and advanced pharmacy practice experience student evaluations. These various approaches have been effective as evidenced by the fact that 71.7% of respondents SA/A that they know how to utilize the process for managing academic misconduct, and 75% SA/A that they know how to utilize the process for managing professional misconduct. Students perceive that the College is trying to positively manage professionalism as evidenced by further information in the *AACP Graduate Survey*. Also, 84.5% of graduates SA/A in the 2009 survey (92.9% in 2008) that preceptors modeled professional attributes and behaviors in the pharmacy practice experiences, and 75.8% SA/A in the 2009 survey (81.4% in 2008) that faculty, administrators and staff were committed to serving as positive role models for students. In the *2008 AACP Alumni Survey*, 90.2% of respondents SA/A that when they were students, the faculty, administrators and staff were committed to developing professionalism, fostering leadership and serving as mentors and positive role models. Among alumni, 89.3% SA/A that when they were students, the faculty displayed respect for their colleagues and students.

The College encourages and maintains funding for travel to state, regional and national meetings for each faculty member. Each faculty member is allowed a budget of \$800/year for travel with an additional \$200 of funding if they are presenting at a meeting. The College also supports student professional organizations and provides funds for them to allow for travel of students to national professional meetings. The amount varies based



on the location of the meeting. Additionally, \$500 is provided to an advisor accompanying the students to a professional organization meeting.

3) **Comments:** Describe a) areas of the program that are noteworthy<sup>29</sup>; b) the program's assessment of its issues and its plans for addressing them with relevant timeframes; or c) findings that highlight areas of concern along with actions or recommendations to address them:

The College continues to stress the importance of professionalism. Even with approximately 95% of students agreeing that they are aware of expected behaviors with respect to professional and academic conduct, the College has expanded the orientation program. This was done in part to engage students in the earliest part of the program on the issue of professional development. In addition, a "Pharmacy Day" has been established each year during the Fall semester. Classes are cancelled with P1 and P2 students convened for a half-day to discuss contemporary topics in pharmacy practice. Finally, the Professionalism Task Force has been formed to provide a mechanism for faculty and students to address policy related to this issue.

4) **Quality Improvements:** Write any additional comments to further advance the quality of the program:

5) **Final Evaluation:** Using your best professional judgment, evaluate how well the program meets the standard by putting a check in the appropriate box :

Meets the Standard	Partially Meets the Standard	Does Not Meet the Standard
<ul style="list-style-type: none"> <li>• The college or school supports students, faculty, administrators, preceptors, and staff participation, where appropriate, in pharmacy, scientific and other professional organizations.</li> <li>• The college or school has a code of expected behaviors and professionalism.</li> <li>• Professional standards are being upheld.</li> <li>• Faculty, administrators, preceptors, staff and students model professional behavior.</li> </ul>	<ul style="list-style-type: none"> <li>• The college or school is in the process of developing student groups and activities.</li> <li>• The college or school is in the process of revising or developing its code of expected behaviors and professionalism and there is evidence that it will be implemented.</li> <li>• The college or school is in the process of addressing concerns regarding faculty or student professional behavior.</li> </ul>	<ul style="list-style-type: none"> <li>• Faculty, administrators, preceptors, staff and students complain about each other's behavior.</li> <li>• The college or school offers little or no financial support for students, faculty, administrators, preceptors, and staff to participate in pharmacy, scientific and other professional organizations..</li> <li>• The college or school has no code of expected behaviors and professionalism or they are not being upheld.</li> <li>• Faculty, administrators, preceptors, staff and students are not modeling professional behavior.</li> </ul>
<input checked="" type="checkbox"/> <b>Meets the Standard</b>	<input type="checkbox"/> <b>Partially Meets the Standard</b>	<input type="checkbox"/> <b>Does Not Meet the Standard</b>

<sup>29</sup> Examples of Noteworthy Areas: A) Faculty are willing to go above and beyond the call of duty to facilitate student learning. B) Faculty and administrators participate in student activities as advisors or participants.

## **e. Faculty and Staff**

### **For Standards 24-26:**

Use a check  to indicate the information evaluated to assess the standards in this section:

- List of full time tenure-track faculty members, including a summary of their academic title, credentials, post-graduate training, and experience. (24)
  - List of full time non-tenure track faculty members, including a summary of their academic title, credentials, post-graduate training, and experience. (24)
  - List of faculty turn-over for the last 5 years and reasons for leaving and timing of replacements. (24)
  - Number of part time, paid faculty and staff. (24)
  - Number of voluntary faculty, with academic title/status and practice site. (24)
  - Number of full time staff members and their areas of responsibility (e.g. administrative support, telecommunication, audiovisual, and computer personnel). (24)
  - List of staff turn-over for the last 5 years and reasons for leaving and timing of replacements. (24)
  - Calculation of student-to-faculty ratio (including students in all program pathways). (24)
  - Teaching load of faculty members, including commitments outside the professional degree program. (24)
  - Evidence of faculty and staff capacity planning and succession planning. (24)
  
  - Description of faculty development programs and opportunities. (25)
  - Description of staff development programs and opportunities. (25)
  - Copy of the faculty handbook section relevant to policies and procedures for faculty recruitment, promotion, tenure (if applicable), and retention. (25)
  - Copy of the faculty handbook (to be made available on site). (25)
  - Description of the process used to assess and confirm the credentials of faculty and staff. (25)
  - Description of how the college or school ensures that the faculty composition, including any contributions from internal and external relationships, encompasses the relevant disciplines within the biomedical, pharmaceutical, social/behavioral/administrative, and clinical sciences to meet the education and research needs as defined by the mission statement. (25)
  - Description of activities undertaken to ensure that faculty members, regardless of their discipline, have developed a conceptual understanding of contemporary pharmacy practice and future trends in a variety of settings. (25)
  - Description of activities undertaken to ensure that faculty members, regardless of their discipline, have developed a conceptual understanding of current and future trends in the scientific basis of the biomedical, pharmaceutical social/administrative and clinical sciences. (25)
  - Summarized list of faculty productivity in research and other scholarly activities, publications, service as an officer or committee member of school or college and external organizations, and other endeavors that promote the profession of pharmacy to society. (25)
  - A list of faculty teaching responsibilities correlated with faculty professional and academic expertise. (25)
  - Description of strategic planning for research productivity in line with the college or school's mission and goals. (25)
  - Timeframe for research productivity. (25)
  - Summarized evidence of faculty and administrators' participation in pharmacy professional and scientific organizations. (25)
  - List of full and part-time paid faculty with pharmacy practice responsibilities, the nature of their practice, their percent effort in practice, and their pharmacy licensure status. (25)
  - Description, if applicable, of how faculty, instructors, and teaching assistants involved in distance education are qualified through training or experience to manage, teach, evaluate, and grade students engaged in distance learning. (25)
  
  - Description of the performance review process for full-time, part-time and voluntary faculty (including preceptors) and staff. (26)
  - Description of the relationship between faculty, preceptor, and staff continuing professional development activities and their performance review. (26)
  - If utilized, examples of faculty portfolios, documenting teaching, research and service activities (to be made available on site). (26)
  - Examples of faculty and staff development programs offered or supported by the college or school. (26)
  
  - Interpretation of the data from the AACP Surveys of Students, Faculty, Preceptors and Alumni.
  - Raw data from the AACP Surveys of Students, Faculty, Preceptors and Alumni.
  - Other documentation or data that provides evidence of meeting the standard.
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**Standard No. 24: Faculty and Staff—Quantitative Factors:** The college or school must have a sufficient number of qualified full-time faculty and staff to effectively deliver and evaluate the professional degree program, while providing adequate time for faculty development, research and other scholarly activities, service, and pharmacy practice.

1) Use the checklist below to rate the program on the requirements of the standard and accompanying guidelines:

	S	N.I.
The college or school has a sufficient number of qualified full-time faculty to effectively deliver and evaluate the professional degree program, while providing adequate time for faculty development, research and other scholarly activities, service, and pharmacy practice.	<input type="radio"/>	<input checked="" type="radio"/>
The college or school has a sufficient number of qualified full-time staff to effectively deliver and evaluate the professional degree program.	<input type="radio"/>	<input checked="" type="radio"/>
Faculty receive adequate support staff resources.	<input type="radio"/>	<input checked="" type="radio"/>
Faculty have time for the following:		
• effective organization and delivery of the curriculum through classroom, small group, laboratory, practice simulation, and oversight and provision of experiential education	<input checked="" type="radio"/>	<input type="radio"/>
• faculty mentoring	<input checked="" type="radio"/>	<input type="radio"/>
• student advising and mentoring	<input checked="" type="radio"/>	<input type="radio"/>
• research and other scholarly activities	<input checked="" type="radio"/>	<input type="radio"/>
• faculty development as educators and scholars	<input checked="" type="radio"/>	<input type="radio"/>
• service and pharmacy practice (where indicated by their position)	<input checked="" type="radio"/>	<input type="radio"/>
• participation in college or school and university committees	<input checked="" type="radio"/>	<input type="radio"/>
• assessment and evaluation activities	<input checked="" type="radio"/>	<input type="radio"/>
The college or school has addressed the guidelines for this standard.	<input checked="" type="radio"/>	<input type="radio"/>

2) **Describe** how the program is meeting the Standard and Guidelines. (On average, text responses for this item, combined with text responses addressing items 3 and 4 below should not exceed 4 pages (4 pages/standard X 30 standards = 120 total text pages to address items 2,3, and 4 for each standard)

As of July 1, 2010, the College has 57.6 FTE paid faculty, staff, and administrators categorized as follows: 44.6 FTE faculty (tenured or tenure-track), 8.0 FTE administration (3.0 FTE/administrative staff +5.0 FTE), 4.0 FTE clerical and 1.0 FTE currently classified as temporary (practicum director) that will be eliminated and placed in the faculty category in summer, 2010. Supplemental faculty funding equates to an additional 5.4 FTE for a total College roster of 50.0 FTE Faculty (see Appendix 24.1). Complementing the College's faculty and staff is an adjunct faculty of over 300 members that contribute to the College's mission through varying degrees of didactic and experiential support (see Appendix 24.2). Students, faculty, staff and administration are supported by approximately 1.5 FTE in information technology. Faculty within the Pharmaceutical Science and Pharmacy Practice departments number 38.6 FTE with six open positions. Currently, one of the open positions is used to fund a contractual arrangement with the Michigan State University Clinical Center for full-time preceptorship of students in an MSU/Sparrow Hospital Family Practice Clinic. A second position is currently committed to the appointment of a temporary, full-time employee (mentioned above) to a tenure-track faculty appointment.

Calculation of the Student:Faculty Ratio (SFR) for the program can be done in a variety of ways based on the faculty numbers used. With a total faculty, tenured/tenure-track/supplemental of 50.0 FTE and a fall 2009 enrollment of 604 students, the SFT is 12.1. When total faculty FTE's are used for calculation (44.6), an SFR of 13.5 results; when open positions are removed from the total faculty numbers (total 38.6 FTE), the SFR increases to 15.6. Mitigating this elevated SFR is the efficient use of the 5.4 FTE in supplemental faculty funding. This funding provides support for didactic and experiential education, reducing the impact of the elevated SFT as a result of open faculty positions. A substantial portion of the supplemental faculty funding is used for APPE placements to ensure that students receive an appropriate level of guidance and mentoring. The student:preceptor ratio for IPPEs is  $\leq 2$  to 1 and the APPEs student:preceptor ratio is  $\leq 4$  to 1. Based on the *2009 Graduate Survey*, the student:preceptor ratio on IPPEs and APPEs is acceptable with 86.2% SA/A.

As seen in Appendix 24.1, all faculty members are highly qualified for their respective positions. The majority of Pharmaceutical Sciences faculty members have completed a baccalaureate degree in pharmacy prior to graduate studies; in addition, the majority of pharmacy practice faculty members have completed a PGY-1 residency, PGY-2 specialty residency, or fellowship program and many have achieved advanced certifications such as CGP, BCPS, CACP, and BCOP.

The College continues to actively recruit qualified faculty members to fill open positions in a very challenging recruitment environment. Faculty resources, turnover rates, and replacement information by department can be seen in Appendices 24.3 and 24.4. The majority of faculty departures were due to career

advancement opportunities within academic pharmacy. Recruitment for the College is headed by the Dean and Associate Dean of the College with support by the Department Chairs and faculty members. The college devotes substantial resources to assist in filling positions with the best applicants available. Efforts to enhance faculty recruitment and retention have focused on securing a competitive salary structure for all faculty members, maintaining support for annual travel and increased faculty development and mentoring through a more formalized process.

The College's off-campus instructional sites are supported by an administrative assistant at each location, complementing the Dean's Office and Pharmaceutical Sciences department staff on campus. At the off-campus sites, administrative assistants are responsible for all daily operations providing support to students and faculty members with teaching responsibilities at the off-campus sites. They play a role in a wide range of activities, from assisting in the delivery and maintenance of the College's distance learning system to performing administrative duties that relieve the Associate Dean of routine administrative issues. IT technicians are also available at each off-campus site through contractual agreements with the Kalamazoo Center for Medical Studies (KCMS) and the Grand Rapids Medical Educational Partners (GRMEP), providing computer and distance learning support as well as maintenance of computer labs at each site. The Dean's office operations are supported with three clerical and one administrative assistant position. An additional clerical position supports the Pharmaceutical Sciences department. In the *2009 AACP/ACPE Faculty Survey*, 52.3% of respondents SA/A with the statement, "I receive adequate support staff resources," this reflects a decline from the 2007 survey in which 73.3% SA/A with the same statement. One part-time Ferris State University student assistant is employed to assist in the clerical tasks of the Dean's Office. This student position contributes approximately 10-14 hours per week of support. The campus also provides IT support personnel to assist with issues that cannot be handled by off-campus support staff.

In general, faculty schedules allow adequate time for student instruction, mentoring/advising, clinical practice, scholarly activity, faculty development, and service. Assignment of teaching responsibilities and workload are governed by the contractual agreement between the Ferris Faculty Association (FFA) and the Board of Trustees of Ferris State University (*The Agreement*). The FFA is a unit of the Michigan Education Association (MEA) and National Education Association (NEA). Section 7.1A of the current agreement indicates that teaching is the "primary professional responsibility" for FSU faculty. Section 7.2.A.1.b.iii (b) clarifies that many factors are considered in determining workload. Additionally, owing to differences among programs and departments, it is understood that creating comparable workload policies is difficult. However, for the purpose of equivalency, a standard workload is defined as twenty-four semester hours per academic year; twenty-four semester hours is equivalent to thirty-six contact hours or 720 student credit hours per academic year. Because of the differences that exist among departments, this value is considered neither a minimum nor maximum. The Pharmacy Practice

department has adopted a workload document that utilizes a goal of twenty-four hours of didactic teaching per academic year for their lecture selection process. Open faculty positions within the department have resulted in frequent overload hours for most faculty members. The Pharmaceutical Sciences department is in the process of developing a workload policy. It is anticipated that a draft will be prepared by fall, 2010. A previous document was created but was not endorsed by college administration due to pending curricular transitions.. All faculty members are invited and are actively involved in College-wide and University-wide committees. This is further discussed in Standard 7.

In the 2009 *AACP/ACPE Faculty Survey*, 33% SA/A that there is a sufficient number of qualified faculty members to teach the College's curriculum. In 2007, 26.6% of faculty SA/A with the same statement. However, when looking at time allocated for teaching, research and service, approximately 75% of faculty reporting SA/A that the expectations are appropriate (more specifically: teaching: 85.7% SA/A, Research: 55% SA/A, Service: 85.7% SA/A, and Clinical Service: 72.2% SA/A).

- 3) **Comments:** Describe a) areas of the program that are noteworthy<sup>30</sup>; b) the program's assessment of its issues and its plans for addressing them with relevant timeframes; or c) findings that highlight areas of concern along with actions or recommendations to address them:

Many efforts have been devoted to enhancing faculty recruitment and retention; recent faculty salary adjustments, primarily focusing on the assistant and associate professor rank, are the most visible. As a result, salaries for most faculty members have been adjusted to that comparable to the 25<sup>th</sup> to 50<sup>th</sup> percentile in the *AACP Survey of Faculty*. To supplement these efforts, the College formalized its professional development efforts through the appointment of a formal Professional Development Committee in 2007. There are also several grant opportunities widely offered at the university and college levels to supplement travel and professional development activities (see Standard 26). The Dean has consistently worked at the University level to protect and maintain the COP budget, avoiding many of the necessary University-wide reductions. In addition, educational leave, consulting time, and travel reimbursement have remained intact.

- 4) **Quality Improvements:** Write any additional comments to further advance the quality of the program:

Recruitment efforts are ongoing to fill open faculty positions with qualified candidates in a competitive recruitment environment and a depressed economic climate in the State of Michigan. The SFR for the College is substantially elevated when open positions are removed from the calculation and brought into appropriate range only with the inclusion of supplemental faculty support. Continued budgetary support for the supplemental faculty is essential in maintaining a qualified faculty. The 2009 appointment of department chairs is intended to increase

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<sup>30</sup> Examples of Noteworthy Areas: A) The college or school does capacity planning in advance. B) Illness or the retirement of a faculty member does not create gaps in teaching or research programs.

support for recruitment in both departments. Pharmaceutical Sciences faculty efforts to complete a workload policy are underway with anticipated completion in fall, 2010. This will reduce the concerns within the department and lead to more equitable distribution of teaching responsibilities.

Overall, quantitative factors within the College must be continually evaluated as implementation of the 2009 Curriculum continues.

5) **Final Evaluation:** Using your best professional judgment, evaluate how well the program meets the standard by putting a check in the appropriate box :

Meets the Standard	Partially Meets the Standard	Does Not Meet the Standard
<ul style="list-style-type: none"> <li>• Faculty have enough time to consider new methods of instruction.</li> <li>• Practice faculty have enough time to develop their practice sites before getting their student assignments.</li> <li>• The college has low rates of faculty turnover, and faculty vacancies are filled quickly.</li> <li>• Only qualified individuals are being given teaching responsibilities, and students consistently report that teaching is good.</li> <li>• The college or school encourages research and other scholarly activity and service without creating undue stress on the faculty.</li> <li>• The proportion of inexperienced to experienced faculty is balanced.</li> <li>• Faculty are able to schedule time to meet with students when needed and are available to students for advising.</li> <li>• Preceptors are able to spend time with students to meet the requirements of experiential education.</li> <li>• Faculty can find mentors if desired.</li> <li>• Faculty rarely complain about having enough support.</li> <li>• Faculty frequently participate in professional or social events.</li> </ul> <p><input type="checkbox"/> Meets the Standard</p>	<ul style="list-style-type: none"> <li>• The college or school has a plan and is in the process of addressing all issues related to not meeting the requirements of this standard.</li> <li>• The college or school experiences lengthy delays in filling open positions.</li> <li>• The college or school has a high turnover of faculty or staff.</li> <li>• The mix of junior to senior faculty and representation of faculty across disciplines is unbalanced.</li> <li>• There is evidence of some stress among faculty, preceptors, or staff due to workload.</li> <li>• Research or other scholarly activity is being limited because of inadequate numbers of faculty and staff.</li> </ul> <p><input checked="" type="checkbox"/> Partially Meets the Standard</p>	<ul style="list-style-type: none"> <li>• Faculty members don't have enough time to consider new methods of instruction.</li> <li>• Practice faculty members don't have enough time to develop their practice sites before getting their assignments.</li> <li>• The college or school has excessive rates of faculty or staff turnover, or there are routinely long delays in filling of faculty or staff vacancies.</li> <li>• Poorly qualified individuals are being given teaching responsibilities, or students have evidence or consistently report that teaching is poor.</li> <li>• Faculty show a drop in performance, research or professional activity in order to meet basic teaching responsibilities.</li> <li>• Faculty are routinely not available to students for advising or are unable to schedule time to meet with students.</li> <li>• There is evidence of insufficient support, such as, faculty or staff resigning due to workload.</li> <li>• Faculty rarely participate in professional or social events.</li> <li>• The college or school is not conducting capacity or succession planning.</li> <li>• Key disciplines are not adequately represented or accommodated in the faculty mix.</li> </ul> <p><input type="checkbox"/> Does Not Meet the Standard</p>

**Standard No. 25: Faculty and Staff—Qualitative Factors:** The college or school must have qualified faculty and staff who, individually and collectively, are committed to its mission and goals and respect their colleagues and students. Faculty must possess the required professional and academic expertise, have contemporary knowledge and abilities in current educational philosophy and techniques, and be committed to the advancement of the profession and the pursuit of research and other scholarly activities. Faculty whose responsibilities include the practice of pharmacy must satisfy all professional licensure requirements that apply to their practice. The college or school must foster the development of its faculty and staff, commensurate with their responsibilities in the program.

1) Use the checklist below to rate the program on the requirements of the standard and accompanying guidelines:

	S	N.I.
The college or school has qualified faculty and staff who, individually and collectively, are committed to its mission and goals and respect their colleagues and students.	●	○
Faculty possess the required professional and academic expertise, have contemporary knowledge and abilities in current educational philosophy and techniques, and are committed to the advancement of the profession and the pursuit of research and other scholarly activities.	●	○
Faculty whose responsibilities include the practice of pharmacy satisfy all professional licensure requirements that apply to their practice.	●	○
The college or school fosters the development of its faculty and staff, commensurate with their responsibilities in the program.	○	●
The college or school ensures that policies and procedures for faculty recruitment, promotion, tenure (if applicable), and retention are established and applied in a consistent manner.	●	○
The college or school ensures that the faculty composition, including any contributions from internal and external relationships, encompasses the relevant disciplines within the biomedical, pharmaceutical, social/behavioral/administrative, and clinical sciences to meet the education and research needs as defined by the mission statement.	●	○
Faculty, regardless of their discipline, have or are developing a conceptual understanding of current and proposed future pharmacy practice in a variety of settings.	●	○
Faculty members have the capability and continued commitment to be effective teachers. Effective teaching requires knowledge of the discipline, effective communication skills, and an understanding of pedagogy, including construction and delivery of the curriculum.	●	○
The college or school fosters an environment that encourages contributions by the faculty to the development and transmission of knowledge.	●	○
The college or school has addressed the guidelines for this standard.	●	○



2) **Describe** how the program is meeting the Standard and Guidelines. (On average, text responses for this item, combined with text responses addressing items 3 and 4 below should not exceed 4 pages (4 pages/standard X 30 standards = 120 total text pages to address items 2,3, and 4 for each standard)

Full-time faculty members have the appropriate education and training to contribute to the professional degree program. Verification of education and training credentials of employees is performed via reference checks prior to appointment. A list of faculty and staff and their educational credentials is found in Appendix 24.1. All faculty members with practice responsibilities are licensed to practice pharmacy in the State of Michigan. The faculty represents disciplines within the biomedical, pharmaceutical, social/behavioral/administrative, and clinical sciences. Teaching assignments are based on expertise in a given area gained by professional degree, graduate degree, post-graduate experiences, and practice experiences. To assure that teaching needs are met by faculty with expertise in any given area, the focus of the College's recruitment and retention efforts is centered on meeting the needs of the curriculum; candidates must also demonstrate a commitment to teaching. The *College Mission Statement* identifies pursuit of research and service as a means of enhancing instruction within the curriculum.

In addition to the qualifications outlined above, several practice faculty members have specialty certification relevant to their practice. All faculty members show evidence of scholarship and publication in their respective disciplines. (A full listing of faculty accomplishments will be available on site.)

Section three of the current *FSU/FFA Agreement* defines the rights and responsibilities of non-tenured faculty members. This policy outlines that each department shall devise policies and procedures for attainment of tenure (see Appendix 25.1 and 25.2). As part of the policy, the criteria for attainment of tenure should be based, in part, on assigned professional responsibilities (i.e., teaching, advising), professional development (i.e., research, scholarship, creative endeavors, consulting), and service (i.e. to FSU and/or College committees, the profession, the community). A non-tenured faculty member appointed at the rank of instructor or assistant professor must apply for tenure no later than his/her fifth year of employment, associate professor no later than the fourth year, and professor no later than the third year. Non-tenured faculty members are evaluated annually by their candidate evaluation team (CET), consisting of two tenured faculty whose function is to assist the new faculty member in his/her progression toward attainment of tenure.

Tenured faculty members are formally evaluated every five years as outlined in the contractual post-tenure policy (see Appendix 25.3). As outlined by this policy, tenured faculty members submit a portfolio for review to the Associate Dean. Required portfolio components include a faculty self-assessment, a student assessment of teaching, advising, and activities and accomplishments. The self-assessment includes a complete and up-to-date curriculum vitae and a narrative assessment summarizing significant accomplishments relative to each of the three performance areas (teaching, service, and scholarship). Summaries of student ratings (the Student Assessment of Instruction

[SAI] or other nationally-normed instrument) are also required. The tenured faculty member also comments on how he/she has incorporated student evaluation data to improve instruction.

A key factor in faculty retention is a strong, comprehensive, professional development program that begins with the appointment. All new faculty and staff are required to attend the campus orientation led by Human Resources as well as the New Faculty Orientation program offered through the Faculty Center for Teaching & Learning (FCTL). The College also has a faculty checklist to ensure that items such as policies and procedures, travel, setting up office, computer training, etc. are completed and discussed with the respective department chair and the DECO. Informally, the College faculty is professionally and socially supportive of new members. The departments often host informal social opportunities to allow new faculty members to get to know the current members of the faculty. In an effort to help new faculty get acquainted, various social outings are encouraged. Acquainting new faculty members with their assigned city and region is an important aspect of a successful transition into academia.

An increasing level of emphasis is placed on scholarly activity within both college departments (see Appendix 25.4). The Promotion and Merit committee routinely assesses the level of scholarly activity demonstrated in a promotion portfolio. Faculty reviews and post-tenure reviews commonly make reference to the level of scholarly activity demonstrated although quantitative requirements have not been established. Professional development programming promotes the faculty members' ability to engage in scholarly activity. These efforts have resulted in modest increases in external funding as well as an increased level of scholarly activity as evidenced by publications, presentations and pedagogical research and innovation. Yet it is recognized that there is a need to address the quantity as well as the quality of scholarly activity while maintaining a balance with the significant teaching commitment that is required of all faculty members.

The majority of the State's community pharmacists are alumni of the College as is a large portion of the State's institutional pharmacists. It is primarily through its alumni and individual efforts of faculty members that the College influences and directs the evolution of the profession. Many faculty members and alumni hold positions of leadership in national, regional and state professional organizations and advisory boards. Faculty members have or are developing a conceptual understanding of current and future pharmacy practice models, but this must be expanded, particularly for non-practice faculty members. Additionally, through placement of Pharmacy Practice faculty at selected clinical sites throughout the state, there has been a significant augmentation of clinical services developed by the College. More recent efforts to assist in the development of Pharmacy Practice Residencies are also a significant contribution to advancing practice standards. The College encourages faculty members to serve in leadership roles within the profession as evidenced by faculty serving in elected and appointed leadership offices in a variety of professional organizations.

The College has been extensively involved in the development and support of a Pharmacy Practice Residency with emphasis in Community Practice. The program is jointly accredited by the APhA and ASHP and is a unique collaboration between Meijer Pharmacy, Pfizer and the College. In addition, Pharmacy Practice faculty are integrally involved in PGY-1 residency programs affiliated with practice sites including Bronson Methodist Hospital, Borgess Medical Center, Sparrow Health System, and Spectrum Health-Butterworth.

- 3) **Comments:** Describe a) areas of the program that are noteworthy<sup>31</sup>; b) the program's assessment of its issues and its plans for addressing them with relevant timeframes; or c) findings that highlight areas of concern along with actions or recommendations to address them:

Faculty members are highly engaged in the promotion of the profession through service. The College faculty provide service to the College, University, profession, and community. Within the College, faculty members are engaged in the governance of the University and the College through membership in standing committees and participation in *ad hoc* and department committees. The faculty members not only are active members but also serve in a variety of leadership roles to advance the profession and mission of the College.

Recognizing the significant increase in new faculty members within the College, professional development programming has been enhanced since the last accreditation visit to develop pedagogical as well as research skills. In the 2007 and 2009 *AACP/ACPE Faculty Surveys*, 100% and 95% of respondents SA/A with the statement “programs are available to me to improve my teaching and to facilitate students learning.”

The faculty's interest in pedagogical issues and knowledge regarding learning theory is demonstrated through the continued efforts to introduce active learning into the curriculum. This sustained effort began as collaboration with the University's Academic Affairs office under the title of “accelerated learning” and included an external instructional designer. Several groups of faculty members met with the instructional designer in a variety of workshops aimed at developing an understanding of active learning principles and applying them to the pharmacy curriculum. Elements of active learning have been incorporated into several courses, including a significant revision of the Pharmacokinetics course (PHAR440). These efforts have been further augmented with the recent AACP Institute on active learning attended by a six-member team from the College.

- 4) **Quality Improvements:** Write any additional comments to further advance the quality of the program:

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<sup>31</sup> Examples of Noteworthy Areas: A) Faculty development emphasizes growth as effective instructors. B) The administration supports faculty in new initiatives. C) Faculty and administrators have a passionate commitment to excellence and to students. D) The college encourages interdisciplinary communication and helps keep non-pharmacist faculty from working in silos. E) Faculty stay up-to-date and are innovative in educational methods and their fields of expertise.

The College must explore methods to encourage and facilitate scholarly activity, taking ideas from other “teaching intensive” institutions. This will contribute to faculty retention and bring recognition to the faculty members. To support increased basic science research, equipment within the College must be updated. In the 2007 and 2009 *AACP/ACPE Faculty Surveys*, 60% and 53.3% of faculty, respectively, SA/A that programs are available for developing competence in research. Reactivation of the research-based “Honors Track” for students would provide incentive for both students and faculty to collaborate in research/scholarship. A more comprehensive and pragmatic approach to fostering research within the College must be developed through dialog between faculty and College administration.

Adequate resources are available for clinical research and the wide array of faculty practices provide support for several types of clinical research (community based, ambulatory care, inpatient). Collaboration among faculty within the College is challenging due to the distributed nature of practice and instructional sites. Attempts have been made to bridge this gap through research collaboration/meeting groups which have since been cancelled; however, professional development sessions continue to focus on research skills and grant writing abilities. Enhanced collaboration and understanding between junior and senior faculty and between departments is needed. According to the 2007 and 2009 *AACP/ACPE Faculty Surveys* only 30% and 33.4% of the faculty SA/A that programs are available for non-practice faculty to orient to the pharmacy profession and education. The University is also re-evaluating its support of research, academic scholarship, and grants.

5) **Final Evaluation:** Using your best professional judgment, evaluate how well the program meets the standard by putting a check in the appropriate box :

Meets the Standard	Partially Meets the Standard	Does Not Meet the Standard
<ul style="list-style-type: none"> <li>• Faculty have appropriate credentials and experience for their positions.</li> <li>• All disciplines are represented or accommodated.</li> <li>• Faculty and staff demonstrate a commitment of the mission and goals of the college or school.</li> <li>• The university or college or school has a commitment to faculty development.</li> <li>• Faculty development programs have documented, high levels of faculty participation.</li> <li>• Faculty understand the ways that they need to improve and are improving.</li> <li>• Faculty responsibilities are commensurate with their abilities. (The right people teaching the right courses)</li> <li>• Practice faculty are all licensed by the state.</li> <li>• Staff have development activities.</li> <li>• The college or school has evidence of scholarly activity and grants.</li> <li>• Educational support systems are being provided to voluntary faculty.</li> </ul> <p><input checked="" type="checkbox"/> <b>Meets the Standard</b></p>	<ul style="list-style-type: none"> <li>• The university or college or school has provided development activities, but faculty and staff are not taking advantage of them.</li> <li>• Practice faculty are in the process of becoming licensed by the state.</li> <li>• The college or school has a plan and is in the process of addressing all issues related to not meeting the requirements of this standard.</li> <li>• A small number of faculty or staff lack required qualifications or experience.</li> <li>• The faculty and staff are not diverse.</li> </ul> <p><input type="checkbox"/> <b>Partially Meets the Standard</b></p>	<ul style="list-style-type: none"> <li>• Little or no faculty or staff development is occurring.</li> <li>• Educational support systems are not being provided to voluntary faculty.</li> <li>• Faculty report that they are not growing professionally or do not see how they can improve.</li> <li>• Faculty report that they have no support for professional activities.</li> <li>• Practice faculty members are not licensed by the state.</li> <li>• A large number of faculty or staff lack required qualifications or experience.</li> <li>• Policies and procedures for faculty recruitment, promotion, tenure and retention are not established or not applied in a consistent manner.</li> <li>• Unlawful discrimination is evident in the selection of staff and faculty.</li> <li>• There is evidence of ineffective teaching.</li> <li>• There is little or no evidence of research or other scholarly activity.</li> </ul> <p><input type="checkbox"/> <b>Does Not Meet the Standard</b></p>

**Standard No. 26: Faculty and Staff Continuing Professional Development and Performance Review:** The college or school must have an effective continuing professional development program for full-time, part-time, and voluntary faculty and staff consistent with their responsibilities. The college or school must review the performance of faculty and staff on a regular basis. Criteria for performance review must be commensurate with the responsibilities of the faculty and staff in the professional degree program.

1) Use the checklist below to rate the program on the requirements of the standard and accompanying guidelines:

	S	N.I.
The college or school has an effective continuing professional development program for full-time, part-time, and voluntary faculty and staff consistent with their responsibilities.	●	○
The college or school reviews the performance of faculty and staff on a regular basis.	○	●
Criteria for performance review are commensurate with the responsibilities of the faculty and staff in the professional degree program.	○	●
The college or school has or provides support for programs and activities for faculty and preceptor continuing professional development as educators, researchers, scholars, and practitioners commensurate with their responsibilities in the program.	●	○
Faculty receive adequate guidance on career development.	●	○
Faculty are able to attend one or more scientific or professional association meetings per year.	●	○
Faculty development programs are available to enhance a faculty member's academic skills and abilities.	●	○
The performance criteria for faculty are clear.	●	○
Expectations on faculty for teaching, scholarship and service are balanced.	○	●
The college or school has addressed the guidelines for this standard.	●	○

2) **Describe** how the program is meeting the Standard and Guidelines. (On average, text responses for this item, combined with text responses addressing items 3 and 4 below should not exceed 4 pages (4 pages/standard X 30 standards = 120 total text pages to address items 2,3, and 4 for each standard)

The Professional Development program and additional faculty and staff development opportunities are a notable strength of the College. The Professional Development Committee was formalized in 2007; prior to that, faculty development sessions had been conducted on a regular schedule since 2003 (Appendix 26.1). A more formalized professional development program was established for 2009-2010 with the goals of developing and mentoring new faculty and providing seasoned faculty with development opportunities (Appendix 26.2). Sessions for the 2009-10 academic year were held twice a month for new faculty and focused on their transition into academia and initial development of their teaching skills. In January, 2010, the sessions moved to once-a-month, focusing on scholarly and professional activities. All College faculty and administrators are invited to attend any of the sessions offered. The Professional Development Committee also works closely with FSU's Faculty Center for Teaching and Learning (FCTL). The Director of the FCTL assists the Professional Development Committee with program development and evaluation, the New Faculty Transitions program (offered as an optional orientation for all FSU new faculty), and identification of potential speakers outside of the College to facilitate some of the sessions.

During the 2008-09 academic year, a focus was placed on enhancing the use of Accelerated Learning in teaching activities and an instructional design consultant was identified to assist faculty to enhance their knowledge and abilities in redesign of coursework. Training started with a core group in August 2008 and then expanded to the entire faculty in Spring 2009. Several faculty have implemented some of these teaching strategies into their coursework; however, after initial experimentation with Accelerated Learning, the College Faculty chose to pursue other active learning strategies and instructional designers to assist in providing students with optimal learning experiences.

For adjunct faculty, two formal preceptor development programs are offered annually. These are designed specifically for College preceptors to strengthen their skills in working with students. One is hosted by the College, and one is held at the Michigan Pharmacists Association Annual Meeting in conjunction with the State's two other colleges of pharmacy. In addition to these formal preceptor development programs, all preceptors have access to the FSU library and online resources. Continuing Education credits are offered free of charge to both faculty and preceptors at the Spring and Fall seminars as well as the Infectious Disease Conference offered annually by the College. A subscription to the *Pharmacist Letter* is also provided for both faculty and preceptors of the College. In the 2007 AACP/ACPE Preceptor survey 89.2 % of preceptors SA/A that the College has an effective professional development program consistent with their responsibilities.

In addition to the formal professional development program, faculty and staff can enroll in up to eight academic credits a semester free at either Ferris State University or Kendall College of Art and Design, attend any of the formal development programs offered by the FCTL, and attend professional meetings. Faculty members have available thirteen days for use in professional, consulting activities. An annual travel stipend of \$800 is provided with an additional \$200 provided if the faculty member is presenting at the meeting attended. All College faculty have access to and are encouraged to apply for many of the grant opportunities that are offered through the University, providing opportunities to enhance their skills as educators, researchers, and scholars (see Appendix 26.3). In 2009, a scholarship program was developed through the College's Alumni Board, offering another grant opportunity for faculty. In 2007, 76.6% of faculty SA/A that they attended at least one or more professional meetings a year (not asked in 2009), and 56.6% and 61.9% SA/A that funds were available to support attending meetings (2007) or supporting their professional development (2009).

In the 2007 and 2009 *ACPE Faculty Surveys*, 100% and 95.2% (respectively) of the faculty SA/A that programs were available to them to improve their teaching and to facilitate student learning. When asked if programming was available to develop competence in research and/or scholarship, 60% (2007) and 52.3% (2009) SA/A. In response to those lower percentages, professional development programs involving research opportunities, grant support services, publishing and presenting scholarly work, and several grant writing workshops were incorporated into the schedule. In 2007 and 2009 surveys 76.7% and 76.2% of the faculty respectively SA/A that guidance on career development was adequate. Career development has also been added to professional development sessions.

As mentioned in Standard 25, faculty are provided an annual face-to-face performance review by their peers until they are tenured through the tenure review process (see Appendices 25.1 and 25.2). Non-tenured faculty are required to maintain a professional portfolio demonstrating their activity in the areas of teaching, scholarly activity and service which is reviewed by the Tenure Review chair on a yearly basis. Once tenured by their peers, faculty undergo a post-tenure review process every five years that includes a self evaluation as well as a review (portfolio required) by the Associate Dean and Dean (see Appendix 25.3). According to the 2009 *AACP/ACPE Faculty Survey*, 66.6% of faculty SA/A that they have access to policies related to their performance. In 2007 46.7% of faculty SA/A that performance assessment are clear, however a slight improvement was seen in 2009 (with 57.2% SA/A). This improvement may be related to the change in leadership within the departments. Similarly, data improved with faculty feeling that policies and procedures for faculty promotion and/or tenure are applied in a consistent manner with 40% SA/A in 2007 and 76.2% in 2009. Lastly, 61.9% of faculty report that performance review is commensurate with their responsibilities.



Every course and pharmacy practice experience is evaluated by the students at the end of the course/pharmacy practice experience. Team-taught courses are also evaluated by the students per individual lecture/faculty member. The student evaluations are viewed by the appropriate Department Chair and then returned to the faculty members. Preceptors of IPPEs or APPEs are evaluated at the conclusion of the experience by the student. The evaluations are forwarded to a member of the Experiential Team. If problems arise with a preceptor, the coordinator will investigate.

- 3) **Comments:** Describe a) areas of the program that are noteworthy<sup>32</sup>; b) the program's assessment of its issues and its plans for addressing them with relevant timeframes; or c) findings that highlight areas of concern along with actions or recommendations to address them:

The professional development program is one of the College's strengths. To continue to meet the faculty's needs, formal assessments were conducted in 2009-2010 and will guide the future programming decisions; in addition, a needs assessment is expected to be conducted in 2010. As a component of future planning, the Professional Development Committee in collaboration with the College Alumni Board developed the Alumni Board of Directors Scholarship Program. The first round of proposals will be accepted through July 2010 for the upcoming academic year (2010-2011). Proposals are to emphasize faculty development, research, or course development.

Although deficiencies in the promotion/merit process have been identified, it is important to recognize that the *FFA/FSU Agreement* provides explicit language regarding the process. This codification of what could be a very subjective process is valuable. Further, as the tenure process and promotion process are similar, faculty members are provided valuable peer review annually.

Recently, the VPAA conducted a pilot evaluation process of a College Dean and a Vice President and it is expected that a further iteration of the process will be implemented for all College administrators in the future. This process will provide faculty with an opportunity for direct evaluation of College administrators and encourage communication between faculty and administration.

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<sup>32</sup> Examples of Noteworthy Areas: A) The college or school uses peer review of teaching. B) Each faculty member's professional development is integrated and accounted for in the professional-development plan. C) The college or school has a formal system for mentoring faculty.

4) **Quality Improvements:** Write any additional comments to further advance the quality of the program:

Reviews of College administrators and administrative staff have been conducted irregularly recently due to vacancies in the College's administrative structure, but will be conducted on a regular basis in the future. The post-tenure review process, somewhat moribund within the College in the recent past, must be reinstated to provide faculty that have been awarded tenure with regular evaluation of their teaching, scholarship and service. Again, with the now completed administrative restructuring in the College, it is anticipated that the Dean and Associate Dean can redirect their efforts in this area.

The *FFA/FSU Agreement* indicates that teaching is the primary professional responsibility for FSU faculty and clearly delineates appropriate workload; however, differences in teaching responsibilities in the Pharmaceutical Sciences and Pharmacy Practice Departments versus that seen across campus require the development of a unique workload policy for each department. In addition, faculty must engage in a reasonable level of scholarly activity and service as a component of both the tenure and promotion process. This, coupled with an expansion of faculty with multiple appointments in the same year and a limit on promotions and merit awards, creates a challenge for faculty members as they seek advancement in academic ranks. To alleviate this situation, additional promotions have been sought by the Dean from the President's office. This has met with varied success from year to year. Many of these difficulties are not unique to the College and it is anticipated that the promotion process will be addressed in future *FFA/FSU Agreements*.

It will be crucial that the Department Chairs work closely with department members, particularly newly appointed members, to thoroughly explain the promotion and tenure process, to define instructional workload as well as scholarship and service expectations, and to ensure that each faculty member avails themselves of the University and College professional development programming available.

5) **Final Evaluation:** Using your best professional judgment, evaluate how well the program meets the standard by putting a check in the appropriate box :

Meets the Standard	Partially Meets the Standard	Does Not Meet the Standard
<ul style="list-style-type: none"> <li>• The college or school has a formal program of professional-development and offers a coordinated series of professional-development programs throughout the academic year for faculty and staff.</li> <li>• The college or school has an informal process for mentoring new faculty.</li> <li>• The system of evaluation is comprehensive, broad-based and includes self, peer, student, and supervisor assessments.</li> <li>• The dean and other administrators are reviewed periodically and that review includes input from other administrators, faculty, students, staff, and preceptors.</li> </ul>	<ul style="list-style-type: none"> <li>• The college or school has a plan and is in the process of addressing all issues related to not meeting the requirements of this standard.</li> <li>• A systematic and periodic evaluation exists, but it is either not comprehensive or not broad-based.</li> </ul>	<ul style="list-style-type: none"> <li>• The college or school has no professional-development plan or it does not address certain categories of employee.</li> <li>• No professional development programs are supported or offered.</li> <li>• There is no evidence of continuing professional development of faculty or staff.</li> <li>• Faculty and staff evaluation procedures are neither comprehensive nor broad-based.</li> </ul>
<input type="checkbox"/> Meets the Standard	<input checked="" type="checkbox"/> Partially Meets the Standard	<input type="checkbox"/> Does Not Meet the Standard

## **f. Facilities and Resources**

For Standards 27-30:

Use a check  to indicate the information evaluated to assess the standards in this section:

- Description of available square footage for all areas outlined by research facilities, lecture halls, offices, laboratories, etc. (27)
  - Description and, where feasible, plans/architectural drawings of the physical facilities. (27)
  - Description of the equipment for the facilities for educational activities, including practice-simulation areas. (27)
  - Description of the equipment for the facilities for research activities. (27)
  - Evaluation of the adequacy and appropriateness of resources needed for assessment activities. (27)
  - Description of facility resources available for student organizations. (27)
  - Description of facilities available for student studying, including computer and printing capabilities. (27)
  - A statement attesting that the facilities meet legal and other standards as appropriate (e.g., animal facilities), with documentation attached (e.g., OLAW, USDA and/or AAALAC). (27)
  - Data backup and security policies and procedures. (27)
  
  - List of practice sites (classified by type of practices) with number of students served, interaction with other health professional students and practitioners, the number of pharmacy or other preceptors serving the facility, and their licensure status. (Sites used in the past academic year should be identified.) (28)
  - Examples of agreements or statements of understanding with practice affiliates and the percent of all experiential sites with completed agreements. (28)
  - Criteria used for selection of various types of practice facilities. (28)
  - Capacity assessment (surplus or shortage) of the required and elective introductory pharmacy practice experiences (IPPEs) and advanced pharmacy practice experiences (APPEs) sites for present and, if applicable, for proposed future student enrollment. (28)
  
  - Data on the use of library resources by pharmacy students and faculty. (29)
  - Analysis of how well college or school holdings address the AACP *Basic Resources for Pharmacy Education*. (29)
  - Library Collection Development Policy. (29)
  - Description of the qualifications of the librarian(s) who act as primary contacts for the pharmacy program. (29)
  - List of search databases available to faculty and students. (29)
  - Description of computer technology available to faculty and students. (29)
  - List of full text journals electronically available. (29)
  - Description of courses/activities throughout the curriculum in which students learn about the educational resources. (29)
  - Description of library orientation and consultation for faculty and preceptors. (29)
  - Description of how remote access technologies and mechanisms that promote use of library information from off-campus sites by faculty, students, and preceptors compare with on-campus library resources. (29)
  
  - A Financial Summary including an analysis of revenues and expenses for the past two and present academic year. (30)
  - Five-year prospective financial *pro forma* for the program. (30)
  - An analysis of federal government support, state government support, tuition, and private giving. (30)
  - Description of how enrollment is planned and managed in line with resource capabilities, including tuition and professional fees. (30)
  - An assessment of faculty contribution (%effort) to the program compared to financial support provided to the college or school of pharmacy for instruction. (30)
  
  - Interpretation of the data from the AACP Surveys of Students, Faculty, Preceptors and Alumni.
  - Raw data from the AACP Surveys of Students, Faculty, Preceptors and Alumni.
  - Other documentation or data that provides evidence of meeting the standard.
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**Standard No. 27: Physical Facilities:** The college or school must have adequate and appropriate physical facilities to achieve its mission and goals. The physical facilities must facilitate interaction among administration, faculty, and students. The physical facilities must meet legal standards and be safe, well maintained, and adequately equipped.

1) Use the checklist below to rate the program on the requirements of the standard and accompanying guidelines:

	S	N.I.
The college or school has adequate and appropriate physical facilities to achieve its mission and goals.	●	○
The physical facilities facilitate interaction among administration, faculty, and students.	○	●
The physical facilities meet legal standards and are safe, well maintained, and adequately equipped.	●	○
Physical facilities provide a safe and comfortable environment for teaching and learning.	●	○
For colleges and schools that use animals in their professional course work or research, proper and adequate animal facilities are maintained in accordance with acceptable standards for animal facilities. N/A (no animal use) <input checked="" type="checkbox"/>	○	○
Animal use conforms to Institutional Animal Care and Use Committee (or equivalent) requirements. Accreditation of the laboratory animal care and use program is encouraged. N/A (no animal use) <input checked="" type="checkbox"/>	○	○
Space within colleges and schools dedicated for human investigation comply with state and federal statutes and regulations. N/A (no human research) <input checked="" type="checkbox"/>	○	○
All human investigations performed by college or school faculty, whether performed at the college or school or elsewhere, are approved by the appropriate Institutional Review Board(s) and meet state and federal research standards. N/A (no human research) <input type="checkbox"/>	●	○
Students, faculty, preceptors, instructors, and teaching assistants have access to appropriate resources to ensure equivalent program outcomes across all program pathways, including access to technical, design, and production services to support the college or school's various program initiatives.	●	○
Commensurate with the numbers of students, faculty and staff, and the activities and services provided, branch or distance campuses have or have access to physical facilities of comparable quality and functionality as those of the main campus.	●	○
Faculty have adequate office space.	●	○
Faculty have adequate laboratory resources and space for their research and scholarship needs.	●	○
Computer resources are adequate.	●	○
Laboratories and simulated environments (e.g. model pharmacy) are adequate.	●	○
Access to study areas is adequate.	●	○
Common space for relaxation and/or socialization is adequate.	●	○
The college or school has addressed the guidelines for this standard.	●	○

2) **Describe** how the program is meeting the Standard and Guidelines. *(On average, text responses for this item, combined with text responses addressing items 3 and 4 below should not exceed 4 pages (4 pages/standard X 30 standards = 120 total text pages to address items 2,3, and 4 for each standard)*

The College's implementation of the entry-level in 2000 brought with it a significant challenge to support enrollment of 120 students annually (now 150 students annually), specifically to provide adequate clinical training opportunities for students with the University campus situated in a community of approximately 10,000 individuals in rural north central Michigan. This led to the development of two additional community campuses – one in Kalamazoo which had been the site of the College's post-BS Doctor of Pharmacy program and the second in Grand Rapids. With this implementation plan, the College strengthened its existing affiliations with the Kalamazoo Center for Medical Studies/Western Michigan University and the Grand Rapids Medical Education and Research Center (now the Grand Rapids Medical Education Partners). These expanded affiliations established dedicated and shared instructional space in each location that included classrooms, computer labs, student study rooms and shared arrangements to use multi-media classrooms. (See Appendix 27.1 for a complete summary of facilities.)

Classroom capacity at the off-campus instructional sites was adequate for the enrollment expansion with capacity for 60 students in Kalamazoo and 95 students in Grand Rapids. However, as the expansion began, the Pharmacy Auditorium was the only room capable of accommodating 150 students. To expand capacity, two adjacent third-floor classrooms were combined to form a single, larger classroom capable of accommodating 150 students. Additionally, conversion of three small first-floor classrooms into a single student commons area immediately across from the large lecture hall was completed that year. In 2008, the College's principal auditorium was completely remodeled to increase student comfort and update technology capabilities for faculty. While the original lecture hall was able to accommodate approximately 320 students in theater-style seating, a reduction in seating capacity to 160 seats greatly enhanced the quality of the learning environment providing each student with a desk-top to organize their materials on, adjustable seating, improved visibility and an advanced audio/visual system capable of distance learning with other sites on- and off-campus.

Two additional projects are in various stages of discussion at this time. The first will convert a first-floor storage area between the existing model pharmacy and practice lab into a sterile admixture preparation room, compliant with Standard 797. This renovation is seen as critical in preparing students for the institutional-based IPPE in the summer following P2. It is envisioned that the room will provide students with a certified clean room environment as utilized in hospital pharmacies. This project is anticipated to be completed for the fall, 2010, semester.

The second facilities project under discussion is the proposal to combine the Grand Rapids and Kalamazoo instructional sites into a single location in the Grand Rapids “medical mile.” The approximately ten block area along Michigan Avenue in Grand Rapids includes offices, classrooms and laboratories for Michigan State University’s College of Human Medicine, the Van Andel Research Institute, Grand Valley State University’s Cook-DeVos Center for Health Sciences and Spectrum Health’s Butterworth Hospital, Holton-Lemmen Cancer Center and the Helen DeVos Children’s Hospital and Clinic. Currently plans call for completion of a single facility of approximately 25,000 square feet to support instruction and training in P3. The University is currently awaiting a decision from the State regarding appropriation of a capital outlay expenditure for the project. The proposed timeline calls for completion of the facility and occupancy in August, 2011. Until that time, leases in both Grand Rapids and Kalamazoo have been extended to ensure instructional continuity.

In each of the three instructional sites, facilities meet all pertinent standards for safety and are well maintained by on-site custodial staffs. Although distinctively different in architectural design, the off-campus instructional sites utilize facilities that share an educational mission, specifically medical education. Thus, students are exposed to physical facilities of comparable quality regardless of location. For example, computer labs have been equipped at all three locations in a consistent manner, utilizing campus standards for the purchase of equipment and software and a pool of technicians that routinely communicate with each other regarding equipment and software. On-campus and in Grand Rapids, a 40-station lab is available while in Kalamazoo, a 32-station lab is available.

Availability of faculty office space is dependent on assignment location. Facilities on campus are more than adequate with each faculty member assigned to a private office and additional offices currently unoccupied. Faculty at clinical practice sites are generally provided an office at the clinical site; in addition, offices are available in both the Grand Rapids and Kalamazoo instructional facilities for faculty with unique assignments. The proposed facilities allowing for consolidation of the two off-campus instructional sites will increase office availability substantially including private offices as well as the ‘hoteling’ arrangements for visiting faculty.

All faculty members are provided laptop or desktop computers by the College with technical support available through the University, although some faculty members may access on-site support if located in a health system or clinic. This arrangement has met most faculty needs and provided a relatively consistent ‘operating platform’ for IT within the College. Directly related to IT equipment and support is the College’s distance learning capacity, connecting classrooms in Grand Rapids with those in Kalamazoo. Renovation of the Pharmacy auditorium has also allowed for distance learning on-campus. Equipment updates at instructional sites have been routine over the past six years and the current level of technology represents the most stable and predictable

arrangement yet achieved. Budgetary realignments may present challenges in the future to provide the continued upgrades that have become commonplace in the past.

Distance learning is relied upon for didactic instruction in the P3 year and most faculty have adapted well to the 'split audience' that results from the arrangement. New faculty members entering the College are made aware of the need to involve both groups and to plan ahead for the use of videoconferencing. Despite these efforts, videoconferencing requirements are undoubtedly the most challenging element of the multi-campus arrangements. All other components of both sites are comfortable and support professional education outcomes.

On-campus, laboratory space has been repurposed for instructional space on both the second and third floors. With this conversion, the remaining laboratory space is appropriately sized for current faculty research activities within the College. Although located in the College of Pharmacy, all functions related to the certified Animal Care Facility are the responsibility of the Provost's office. None of the College's courses require the use of live animals.

Despite the above-mentioned facilities, faculty members are concerned that the existing resources may be inadequate to support the current enrollment level. The majority of the faculty disagrees that the College's resources are adequate for the class size; 76% disagreed in 2007 and 66% in 2009. Whereas, 83.1% of 2008 graduates and 79.3% of 2009 graduates SA/A with the statement "the classrooms in the college were conducive to learning." Labs and other non-classroom environments were also highly rated by graduates with 82.3% of 2008 graduates and 89.7% of 2009 graduates SA/A with the statement "Labs and other non-classroom environments were conducive to learning."

Proposed renovations on-campus and the pending consolidation of the Grand Rapids and Kalamazoo instructional sites into a single, larger facility will address some of the concerns relating to office space and room to interact with students. Overall, faculty members say they have the resources needed to fulfill their responsibilities. The large majority of the program's graduates feel that the spaces and computer resources were sufficient to meet their educational needs.

3) **Comments:** Describe a) areas of the program that are noteworthy<sup>33</sup>; b) the program's assessment of its issues and its plans for addressing them with relevant timeframes; or c) findings that highlight areas of concern along with actions or recommendations to address them:

The College of Pharmacy has devoted substantial resources to ensuring that the Doctor of Pharmacy program is supported adequately both on- and off-campus. Two novel locations have been renovated and equipped to provide instructional space and faculty offices for the third year of the program. This has placed

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<sup>33</sup> Examples of Noteworthy Areas: A) The college or school has dedicated space for student organizations. B) The college or school has a facilities plan to anticipate and meet future needs. C) The layout of the building encourages interdisciplinary cooperation. D) The layout of the building encourages inter-professional cooperation.



students in academic medical organizations located in larger population centers in West Michigan, facilitating access to clinical placements. Further, the College has committed substantial resources to the implementation and refinement of the videoconferencing facilities in each location. On-campus space has been repurposed from laboratory to classroom configurations to reflect the diminished use of research labs and increased use of cognitive labs/small classrooms in the evolving pharmacy curricula.

4) **Quality Improvements:** Write any additional comments to further advance the quality of the program:

In response to the *AACP/ACPE Faculty Survey* indicating a significant level of disagreement in regard to facilities, focus group discussions will be facilitated by the Department Chairs to ascertain perceived deficiencies. Deployment and refinement of the new curriculum will require integration at many points within each professional year. Consolidating the P3 year in Grand Rapids will facilitate this transition and will increase total physical resources available and consistency of resources for all students.

5) **Final Evaluation:** Using your best professional judgment, evaluate how well the program meets the standard by putting a check in the appropriate box :

Meets the Standard	Partially Meets the Standard	Does Not Meet the Standard
<ul style="list-style-type: none"> <li>• The physical facilities support the mission and goals of the program.</li> <li>• Teaching space supports the needs of the curriculum (e.g., small group learning rooms).</li> <li>• The student lounge and study space are adequate and readily accessible.</li> <li>• The facilities allow for good interaction among faculty, students, and administrators.</li> <li>• The college or school has approvals for animal and human research facilities (if applicable),</li> <li>• Full-time faculty each have designated space to work and off-site faculty have dedicated space to work and prepare.</li> <li>• Space is available for faculty and administrative meetings and private areas are available for closed conferences (e.g. with students).</li> <li>• The facilities are equipped to support contemporary educational technologies and educational methodologies used in the program.</li> <li>• Research facilities are equipped with appropriate technology.</li> </ul>	<ul style="list-style-type: none"> <li>• The facilities are generally satisfactory, but a few areas are in poor repair, inadequately equipped, or are furnished with outdated equipment or technology.</li> <li>• The college or school has a plan and is in the process of addressing all issues related to not meeting the requirements of this standard.</li> </ul>	<ul style="list-style-type: none"> <li>• Some facilities are unsafe for students, faculty and staff.</li> <li>• Classrooms or faculty areas are overcrowded.</li> <li>• The student lounge and study space are inadequate or not readily accessible.</li> <li>• The college or school has no approvals for animal facilities or human research (when required).</li> <li>• Full-time faculty have inadequate or no designated space to work or off-site faculty have no dedicated space to work and prepare.</li> <li>• No space is available for faculty and administrative meetings or no private areas are available for closed conferences (e.g. with students).</li> <li>• The facilities are not equipped to support contemporary educational technologies and educational methodologies used in the program.</li> <li>• In general, the research facilities are poorly or inappropriately equipped.</li> <li>• The college of school has no long-term plans to assess the requirements for physical facilities by the program.</li> </ul>
<input checked="" type="checkbox"/> Meets the Standard	<input type="checkbox"/> Partially Meets the Standard	<input type="checkbox"/> Does Not Meet the Standard

**Standard No. 28: Practice Facilities:** To support the introductory and advanced pharmacy practice experiences (required and elective) and to advance collaboratively the patient care services of pharmacy practice experience sites (where applicable), the college or school must establish and implement criteria for the selection of an adequate number and mix of practice facilities and secure written agreements with the practice facilities.

1) Use the checklist below to rate the program on the requirements of the standard and accompanying guidelines:

	S	N.I.
The college or school collaboratively advances the patient-care services of its practice sites.	●	○
The college or school establishes and implements criteria for the selection of an adequate number and mix of practice facilities.	●	○
The college or school establishes and implements criteria to secure written agreements with the practice facilities.	●	○
Before assigning students to a practice site, the college or school screens potential sites and preceptors to ensure that the educational experience would afford students the opportunity to achieve the required competencies.	●	○
At a minimum, for all sites for required pharmacy practice experiences and for frequently used sites for elective pharmacy practice experiences, a written affiliation agreement between the site and the college or school is secured.	●	○
The college or school identifies a diverse mixture of sites for required and elective pharmacy practice experiences.	●	○
The academic environment at practice sites is favorable for faculty service and teaching.	●	○
The college or school has addressed the guidelines for this standard.	●	○

2) **Describe** how the program is meeting the Standard and Guidelines. *(On average, text responses for this item, combined with text responses addressing items 3 and 4 below should not exceed 4 pages (4 pages/standard X 30 standards = 120 total text pages to address items 2,3, and 4 for each standard))*

Experiential programming within the College of Pharmacy is designed to sequentially develop the student's knowledge, skills and abilities in each professional year. There is a defined progression of the depth of experiential education that transitions from early preceptor modeling to ultimately, preceptor facilitation of independent learning. Practice facilities utilized by the College for all IPPE and APPEs precepted by Pharmacy Practice or adjunct faculty are detailed in Appendix 24.2. Departmental faculty primarily precept adult in-patient medicine and ambulatory medicine experiences, though specialty areas such as pediatrics, oncology, psychiatry and drug information are also supported by department faculty members.

In the P1 year, students visit selected preceptors in a variety of practice settings (community, institutional, academia) and prepare a report that is presented orally in the P1 Integrated Lab course. Assignments are made by a faculty member to ensure a variety of practice settings among the class and that students visit practices that they are unfamiliar with. A complete orientation, outlining the learning outcomes of the visits, is provided to all students prior to the visit.

In the 2000 Curriculum, P3 experiential assignments occur at a broad range of sites inclusive of both community pharmacy and institutional settings. The community experience has been a longitudinal (one day per week) experience for one semester during the P3 year. The institutional experience has consisted of a three-week block during the summer following the P3 year. The community IPPE is highly structured and focuses on non-prescription therapy and management-related topics. The institutional IPPE concentrates on the dispensing and workflow processes of an inpatient pharmacy. In the 2009 curriculum, both experiences will be three-week blocks in the summer after the P1 (community) and P2 (institutional) years to foster earlier engagement in these practice settings. The Experiential Team (ET), consisting of the experiential coordinator, practicum director and community practice faculty members, is responsible for assigning students to sites and ensuring that all requirements are met.

Annually, the Experiential Coordinator (EC), the Director of External Clinical Operations (DECO), and Associate Dean meet to review the necessary number of adjunct practice sites needed for the upcoming scheduling cycle. Factors such as faculty vacancies, scheduled leaves and budget considerations determine adjunct practice facility needs. Additionally, the EC regularly reviews the geographic and practice focus of adjunct facilities. The College screens all potential sites and preceptors on the basis of criteria outlined below for required pharmacy practice experiences. The ET is in the process of developing formalized self-assessment documents that will be utilized in the identification of all potential new sites and preceptors. Practice sites are routinely visited to ensure

that appropriate policies and procedures are followed. In addition, student evaluations of the sites and preceptors are utilized in the ongoing evaluation of practice site quality.

The College recognizes the importance of practice site resources for student learning and clinical faculty development. Most faculty members (66.7%) SA/A that they had adequate resources for their research and/or scholarship needs. The College also places great emphasis on selecting quality adjunct faculty-supported experiential sites. Of recent graduates surveyed, 71% SA/A that the sites selected for IPPE education are of high quality. In addition, considering both introductory and advanced pharmacy practice experiences, recent graduates felt that the process by which experiential sites were assigned is fair (77% for IPPEs and 72.4% for APPEs).

To assist students in experiential site selection, practice site descriptions, requirements and other information resources are available either in print or online. A new site evaluation form, to be implemented in summer of 2010, will further support the selection of high-quality practice settings.

Recognizing the value of student exposure to diverse patient populations and practice settings, the College offers a variety of elective APPEs. Unique opportunities include clerkships with the Michigan Pharmacist's Association, Blue Cross/Blue Shield of Michigan, nuclear pharmacies, a drug information centers and others. Further, students selected through an application and interview process have the opportunity to participate in an international pharmacy student exchange program with the University of Angers (France) and the University of Bath (England). With advance planning and approval by the ET, students are able to self-arrange experiences in specialty practice areas not currently provided by the College. The majority of alumni surveyed (84.8%) SA/A that, during their experiential education, an adequate number and mix of practice facilities were provided. Likewise, 91% of recent graduates SA/A that their experiential education allowed them to have direct interaction with diverse patient populations (e.g. age, gender, ethnic and/or cultural background, disease states).

Involvement in interdisciplinary health care teams is recognized as essential to student development of patient care skills. Health care professionals with whom students regularly interact include physicians, nurses, dietitians and others, as well as students from many of these disciplines. Recent graduates and preceptors alike overwhelmingly SA/A that the experiences provided by the College allowed the students to collaborate with other health care professionals (95% and 97.9%, respectively).

In the 2009 AACP/ACPE survey only 34.4% of faculty SA/A that the College program's resources can accommodate present student enrollment. To address this concern, the College is continuously and actively seeking additional practice sites and adjunct faculty members to precept pharmacy practice experiences. Adding to this concern, in the 2009 Curriculum, total experiential hours will increase with the implementation of a "Longitudinal Patient" experience in the P2 and P3 years, as well as a required institutional APPE in the P4 year. With the recent

appointment of a practicum director and a community experiential coordinator, new practice sites are being developed and will increase capacity to address the expanded experiential requirements.

An affiliation agreement is established by the College prior to faculty or student placement at experiential sites whenever possible. Two standardized agreements exist, one for sites precepted by adjunct faculty (see Appendix 28.1) and a second for sites with an assigned Pharmacy Practice department faculty member (see Appendix 28.2). Both agreements clearly outline the responsibilities, commitments and expectations of the College and the site and include provisions for termination of the agreement following appropriate notification. The agreements also address requirements and expectations pertaining to student-related matters including liability and professional conduct. When a standardized agreement is not used (a site-specific agreement), the DECO, assisted by the University's legal counsel and risk management office, thoroughly reviews the proposed agreement to ensure all language is consistent with the essential elements of the University's standard agreement.

Approximately 80% of adjunct supported experiential sites currently utilized have affiliation agreements on file with the College of Pharmacy's DECO. All practice sites with College faculty assigned have affiliation agreements in place or are affiliated through membership in other organizations (i.e. GR-MEP). The College is actively working to ensure that all practice sites regularly used have affiliation agreements on file and that these agreements are updated at regular intervals.

Students are required to maintain a valid intern license beginning with experiential activities in the P1 year. Prior to any experiential placement, students must complete a "Clinical Passport" (see Appendix 28.3), which ensures that various prerequisites are met, including required immunizations, HIPAA training and more. Students failing to meet these requirements are not allowed to engage in clinical activities required by the curriculum. The DECO oversees the completion of this requirement prior to experiential placement.

To help guide overall experiential programming, the ET has recently convened an Experiential Advisory Board (EAB). The EAB consists of interested adjunct and departmental faculty members and meets periodically to discuss timely issues pertaining to and suggestions for improvement of experiential education across a variety of practice settings. As a result, the College has gathered and will continue to elicit vital input from this group and ensure open communication between experiential faculty and the College in the ongoing quality improvement of pharmacy practice facilities.

- 3) **Comments:** Describe a) areas of the program that are noteworthy<sup>34</sup>; b) the program's assessment of its issues and its plans for addressing them with relevant timeframes; or c) findings that highlight areas of concern along with actions or recommendations to address them:

The College has taken significant steps to enhance the quantity, quality and consistency of all aspects of the curriculum's experiential components. The formation of the ET, consisting of approximately 3.5 FTE's, provides support for the further development of existing clerkships and the implementation of new clerkships. This group is further supported by the DECO position, responsible for all aspects of the students' Clinical Passport system. This level of organization is a significant step forward since the last accreditation process, representing a commitment of resources by the College to ensure that experiential elements of the curriculum exceed accreditation standards and provide students with hands-on experiences in state-of-the-art practices. Complementing this experiential administrative structure, the ET has reorganized the EAB to gather *practitioner-based* insights in the continual quality improvement process for all experiential components. This added perspective ensures that refinements in experiential elements considers academic and practice objectives.

Implementation in fall, 2010, of a new management system for experiential scheduling will bring with it significant increases in the College's ability to communicate with students and adjunct faculty in all aspects of experiential education, including scheduling, report preparation, outcome achievement and evaluation and assessment. Although a significant cost to the College at a time of tightened budgets, this commitment is further evidence of the importance the College places on the conduct of its experiential programming.

- 4) **Quality Improvements:** Write any additional comments to further advance the quality of the program:

Development of practice site selection criteria and a more formalized method for identification of practice sites and adjunct faculty is underway by the ET. Continued growth within the adjunct faculty and clinical practice site listing necessitates that this be completed promptly. With heavy reliance on adjunct faculty for preceptorship of elective clerkships, the ET must ensure that an appropriate mix of clerkships are available to students to meet their experiential interests and ensure that practice specialty and patient diversity is considered.

Assignment of the Clinical Passport system to the DECO has resulted in a significant improvement in compliance with all experiential requirements for students. Continued escalation of requirements for placement has led to an exponential increase in information and organizational needs which will be addressed by the implementation of a new management system. Current levels of staffing within the College do not provide routine clerical support to the ET or the DECO for these essential roles. This must be re-evaluated as the scheduling system is integrated daily into operations and placement requirements continue to expand.

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<sup>34</sup> Examples of Noteworthy Areas: A) A college or school representative visits every rotation during each practice experience. B) Students are integrated into the daily activity of the practice sites. C) Support staff at the practice site (e.g., in retail) are involved and integrated into the education of the student. D) Students have dedicated space at the sites. E) The college or school provides a system for housing students during advanced-practice experiences.

5) **Final Evaluation:** Using your best professional judgment, evaluate how well the program meets the standard by putting a check in the appropriate box :

Meets the Standard	Partially Meets the Standard	Does Not Meet the Standard
<ul style="list-style-type: none"> <li>• Practice sites have enough variety and scope to meet curricular needs.</li> <li>• The college or school has enough practice facilities to meet the required and elective advanced pharmacy practice experiences for all students.</li> <li>• The college or school has a plan for reviewing practice sites and an evaluation process exists to assure annual contact with every site.</li> <li>• The college has a procedure to investigate problems noted on student assessments of the site or the preceptor.</li> <li>• Students have opportunities to observe and learn regardless of the level of the practice experience.</li> <li>• Written affiliation agreements established between the institution and school are confirmed by the experiential director.</li> <li>• The preceptors are able to maintain control of their schedules.</li> <li>• Collectively, rotations occur in diverse practice settings (community, institutional, etc.), and cover diverse patient populations in terms of disease state, race, age, gender, cultural background.</li> <li>• College or school assessment tools and library facilities are accessible from the practice sites.</li> <li>• Collectively, the sites offer not only required, but also elective rotations.</li> <li>• The college or school actively collaborates with practice sites to advance patient-care services.</li> </ul>	<ul style="list-style-type: none"> <li>• <input checked="" type="checkbox"/> The college or school has practice sites and is trying to develop or improve relationships.</li> <li>• Most, but not all of the practice sites have signed affiliation agreements.</li> <li>• The college or school has a plan and is in the process of addressing all issues related to not meeting the requirements of this standard.</li> </ul>	<ul style="list-style-type: none"> <li>• There are too few advanced practices rotations or preceptors to meet curricular needs (i.e., not enough sites for all students, too many students per rotation or preceptors have no periods of time without students on a rotation).</li> <li>• Collectively, the practice sites have insufficient variety and scope to meet curricular needs.</li> <li>• The college or school does not have enough practice facilities to meet the required and elective advanced pharmacy practice experiences for all students.</li> <li>• The college or school has no plan for reviewing practice sites or no evaluation process exists to assure annual contact with every site.</li> <li>• The college has no procedure to investigate problems noted on student assessments of the site or the preceptor.</li> <li>• Written affiliation agreements established between the institution and school are not confirmed by the experiential director.</li> <li>• The preceptors are unable to maintain control of their schedules.</li> <li>• Most rotations occur in uniform settings (e.g., all community, etc.) or cover similar patient populations in terms of disease state, race, age, gender, cultural background.</li> <li>• The site has no access to the college or school assessment tools or library facilities.</li> <li>• Collectively, the sites offer no elective rotations.</li> <li>• The practice site is not conducive or amenable to faculty service and teaching.</li> </ul>
<input type="checkbox"/> Meets the Standard	<input checked="" type="checkbox"/> Partially Meets the Standard	<input type="checkbox"/> Does Not Meet the Standard

**Standard No. 29: Library and Educational Resources:** The college or school must ensure access for all faculty, preceptors, and students to a library and other educational resources that are sufficient to support the professional degree program and to provide for research and other scholarly activities in accordance with its mission and goals. The college or school must fully incorporate and use these resources in the teaching and learning processes.

1) Use the checklist below to rate the program on the requirements of the standard and accompanying guidelines:

	S	N.I.
The college or school ensures access for all faculty, preceptors, and students to a library and other educational resources that are sufficient to support the professional degree program and to provide for research and other scholarly activities in accordance with its mission and goals.	<input checked="" type="radio"/>	<input type="radio"/>
The college or school fully incorporates and uses library and other educational resources in the teaching and learning process.	<input checked="" type="radio"/>	<input type="radio"/>
The college or school has addressed the guidelines for this standard.	<input checked="" type="radio"/>	<input type="radio"/>



2) **Describe** how the program is meeting the Standard and Guidelines. (On average, text responses for this item, combined with text responses addressing items 3 and 4 below should not exceed 4 pages (4 pages/standard X 30 standards = 120 total text pages to address items 2,3, and 4 for each standard)

The College established and supports a Drug Information Center in collaboration with the Kalamazoo Center for Medical Studies (KCMS). The Center is staffed full-time by a tenured faculty member of the College and serves as a resource for clinicians at KCMS and for College faculty and students. The Center provides a core of information resources and expert assistance for college students, adjunct faculty and faculty as well as KCMS clinicians in obtaining and evaluating appropriate resources. There is a close collaboration between the Center and the University's library, the Ferris Library for Information, Technology and Education (FLITE).

FLITE is located on the main campus and serves as a physical and virtual gateway to vast information resources. This state-of-the-art facility is equipped with nearly 200 publicly available computers, and offers wireless connectivity throughout the building. Instructional studios and computer labs within the library provide accommodations for library instruction sessions, as well as offer a meeting place for classes, student meetings and student groups. Fifty-five study rooms are available to library patrons, with various configurations to accommodate individual study, group study, or offer facilities for video material viewing. The library's extended studies area is open around the clock through the majority of the school year and allows access to computers and printers, in addition to group study areas and study rooms. An adaptive technologies room is housed in the library that offers assistive devices for students needing special accommodations. FLITE also is home to a media production center to assist students and faculty in creating digital media (e.g. DVD) as well as print media (e.g. posters for presentations at meetings). Students on campus can also access the resources from any point on campus, including the dormitories; students off-campus can access FLITE's resources through a proxy server system.

The library has extensive holdings, including approximately 350,000 print volumes, and access to over 50,000 journals, with the vast majority of the journals being available online. The number of online books (e-books) currently numbers 32,000. The library has focused on collecting titles recommended by the American Association of Colleges of Pharmacy (AACP), and currently holds 96% of the recommended core titles (26% available online) listed in the 2008 version of the *Basic Resources for Pharmacy Education* and 58% of recommended non-core titles (31% available online). FLITE has access to 73% of the recommended journals (96% available online) listed in the 2009 *AACP Core List of Journals for Libraries that Serve Schools and Colleges of Pharmacy* (See Appendix 29.1). Cross-searching of journals is facilitated by access to many databases, and a listing of selected databases can be found in Appendix 29-2. FLITE provides a free interlibrary loan (ILL) service for students, faculty, and affiliated adjunct faculty to obtain articles that are not directly accessible. Students, faculty and staff can also get books using the MelCat system; cooperating libraries that share resources. Information on the MelCat system can be found at: <http://www.ferris.edu/library/distanceed/melcatdistanceed.html>. In addition an

individual can request a book through the ILL system with direct shipment to the individual. Because of the extensive online availability of resources and systems in place to deliver books, off-campus students and faculty have broad access to library materials that is comparable to that of on-campus students.

The College is allotted an annual budget by the library for the purchase of books and other materials. Pharmacy faculty input is solicited by the Health Sciences Librarian to support the curriculum and interests of the program. Because pharmacy students may be at sites other than the main campus, the electronic format is routinely selected when available to optimize access to resources.

In addition to FLITE, the students in the off-campus sites have access to local institutional libraries. In Grand Rapids, the students have access to two medical libraries – St. Mary's Mercy Medical Center and Spectrum Health - and one library in Kalamazoo - Bronson Health System. Students completing IPPEs/APPEs also have access to the resources located within that clerkship's site.

Adjunct faculty members have full access to FLITE resources. This access provides all adjunct faculty members with an important resource for student instruction as well as an incentive to those considering an adjunct appointment. In addition, all community practice IPPE and APPE practice sites are provided a current copy of the APhA OTC Handbook.

Students are introduced to FLITE'S resources in their first professional year as part of Integrated Lab I (PHPR 303). In-depth instruction on the use of FLITE resources is provided in the Drug Literature Evaluation and Study Design course (PHPR 550). The database *AccessPharmacy* was recently acquired and is available to all College students, faculty and adjunct faculty and has obviated the need for purchase of many textbooks by students. On a selective basis, print versions of key textbooks are purchased for faculty use.

All new faculty are oriented to FLITE's resources during the New Faculty Orientation program offered by Ferris. Adjunct faculty members are made aware of available resources at the annual Preceptor's Development Conference as well as through mass e-mails throughout the year.

Overall, the students, faculty and adjunct faculty SA/A that there are sufficient resources available for the COP. In 2007, 76.7% of the faculty SA/A that they had access to the library and other educational resources compared to 95.3% in 2009. According to the 2007 preceptor survey, 70% of adjunct faculty SA/A that Ferris provided access to library and educational resources. Since that time preceptors have been given access to FLITE's resources and to the Education Scholar program. Alumni completing the graduate survey agreed or strongly agreed that they had adequate access to resources while on campus (96% in 2008 and 97% in 2009) and during pharmacy practice experiences (95% in 2008 and 93% in 2009).

The University's use of Tegrity, a lecture capturing software platform, allows faculty to record live lectures and upload them to Blackboard courses, allowing students to view these at their leisure. All three campuses are

equipped to record lectures utilizing Tegrity and all off-campus faculty members have laptops that support Tegrity software. Other programs are also available to help students in their studies, including Study Mate (a game creation software) and SafeAssign (a program that allows students and faculty to check for plagiarism), that can be made available to students through Blackboard.

- 3) **Comments:** Describe a) areas of the program that are noteworthy<sup>35</sup>; b) the program's assessment of its issues and its plans for addressing them with relevant timeframes; or c) findings that highlight areas of concern along with actions or recommendations to address them:

The College is capable of addressing drug information needs through resources in both FLITE and the KCMS Drug Information Center with a high-level of expertise. Ongoing collection development for the College of Pharmacy occurs on an annual basis with input sought from College faculty by the FLITE medical sciences librarian with purchases based on need and available budget appropriations. The College was recently able to obtain access to two new databases (AccessPharmacy & Lexi-Comp) that further enhance the student's capabilities in patient care. The health sciences librarian reviews the holdings in FLITE and compares them to AACP's list on an annual basis so as to target recommended titles for purchase. Recommended titles that FLITE does not have are purchased when the budget allows.

Adjunct faculty access to all FLITE resource's was established in 2009 after significant efforts with the University's Human Resource department. FLITE access allows adjunct faculty to utilize resources that will help further the student's experiences and learning while on IPPEs/APPEs.

- 4) **Quality Improvements:** Write any additional comments to further advance the quality of the program:

Increased utilization of FLITE resources has led to a significant increase in costs, especially through ILL. This has resulted in a limit on ordering articles which may negatively impact patient care if excessive articles are needed. This has been relieved by FLITE's purchase of more electronic journal subscriptions reducing ILL volume. In addition, access to health information resources and libraries, an expectation of the affiliation agreement, provides students and assigned faculty 'local' support for routine information needs. Continued development of FLITE's electronic resources and refinement of the ILL process will be critical as information resource utilization continues to increase.

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<sup>35</sup> Examples of Noteworthy Areas: A) Recordings of all lectures are available to students. B) A master academic plan exists for the library. C) The University has personnel (e.g. instructional designers, web developers, etc.) to support faculty who wish to improve their teaching or instructional materials. D) The library has dedicated staff for pharmacy. E) Liaisons are assigned between the library and the college or school.

5) **Final Evaluation:** Using your best professional judgment, evaluate how well the program meets the standard by putting a check in the appropriate box :

Meets the Standard	Partially Meets the Standard	Does Not Meet the Standard
<ul style="list-style-type: none"> <li>• Students and faculty have access to hardcopy or on-line journals and references.</li> <li>• Preceptors and students on advanced-practice rotations have access to library resources.</li> <li>• Library skills are taught, and library use is integrated into teaching-and-learning processes.</li> <li>• Customary references used by practitioners are available to students on-site.</li> <li>• Technology is available to students.</li> <li>• Holdings are of sufficient breadth and depth to support teaching, learning, research and other scholarly activity.</li> </ul>	<ul style="list-style-type: none"> <li>• The holdings meet programmatic and scholarly needs, but are not always readily or easily accessible (e.g., the library has limited access hours).</li> <li>• The college or school has a plan and is in the process of addressing all issues related to not meeting the requirements of this standard.</li> </ul>	<ul style="list-style-type: none"> <li>• Materials ordered through Inter-library loan arrive after they are needed.</li> <li>• Faculty report that journals for their discipline are not available or that they must purchase their own subscriptions.</li> <li>• Students have inadequate or no access to hardcopy or on-line journals and references.</li> <li>• Preceptors and students on advanced-practice rotations have no access to library resources.</li> <li>• Library skills are not taught or library use is not integrated into teaching-and-learning processes.</li> <li>• Technology is not available to students.</li> </ul>
<input checked="" type="checkbox"/> <b>Meets the Standard</b>	<input type="checkbox"/> <b>Partially Meets the Standard</b>	<input type="checkbox"/> <b>Does Not Meet the Standard</b>

**Standard No. 30: Financial Resources:** The college or school must have the financial resources necessary to accomplish its mission and goals. The college or school must ensure that student enrollment is commensurate with its resources.

1) Use the checklist below to rate the program on the requirements of the standard and accompanying guidelines:

	S	N.I.
The college or school has the financial resources necessary to accomplish its mission and goals.	●	○
The college or school ensures that student enrollment is commensurate with its resources. Enrollment is planned and managed in line with resource capabilities, including tuition and professional fees.	○	●
Tuition for pharmacy students is not increased to support unrelated educational programs.	●	○
The college or school operates with a budget that is planned, developed, and managed in accordance with sound and accepted business practices.	●	○
Financial resources are deployed <u>efficiently</u> and <u>effectively</u> to:		
• support all aspects of the mission, goals, and strategic plan	○	●
• ensure stability in the delivery of the program	●	○
• allow effective faculty, administrator, and staff recruitment, retention, and development	●	○
• maintain and improve physical facilities, equipment, and other educational and research resources	●	○
• enable innovation in education, research and other scholarly activities, and practice	●	○
• measure, record, analyze, document, and distribute assessment and evaluation activities	●	○
• ensure an adequate quantity and quality of practice sites and preceptors to support the curriculum	●	○
The dean reports to ACPE, in a timely manner, any budget cuts or other financial factors that could negatively affect the quality of the professional degree program or other aspects of the mission of the college or school. N/A (no budget cuts or other factors since last accreditation visit) <input type="checkbox"/>	●	○
The college or school ensures that funds are sufficient to maintain equivalent facilities (commensurate with services and activities) across all program pathways. N/A (no alternate pathways) <input checked="" type="checkbox"/>	○	○
The college or school has addressed the guidelines for this standard.	●	○

2) **Describe** how the program is meeting the Standard and Guidelines. (On average, text responses for this item, combined with text responses addressing items 3 and 4 below should not exceed 4 pages (4 pages/standard X 30 standards = 120 total text pages to address items 2,3, and 4 for each standard)

The University’s fiscal status has been negatively impacted by the State’s budgetary challenges over the past several years. The State’s deteriorating financial picture for the State is reflected in the University budget with fluctuations in operating appropriations.

**Table 30.1 State Appropriations**

	2005-06	2006-07	2007-08	2008-09	2009-10
State Operating Appropriation	\$49,020,809	\$43,904,937	\$54,280,354	\$50,228,100	\$48,621,800
State Capital Appropriation	\$127,395	\$4,017,050	\$1,404,880	\$111,771	\$4,021,563
<b>TOTAL</b>	<b>\$49,148,204</b>	<b>\$47,921,987</b>	<b>\$55,685,234</b>	<b>\$50,339,871</b>	<b>\$52,643,363</b>

Faced with continued uncertainty in the level of State appropriations, University administration has proactively sought repeated budgetary reductions from all university constituents, including the Division of Academic Affairs and thereby individual Colleges. Despite an increase in the College’s total general fund allocations from \$8.1M in 2005-06 to \$9.16M in 2009-10, fiscal restructuring resulted in elimination of the Assistant Dean/Department Head, Pharmaceutical Sciences, in 2009. Faculty salary equity adjustments were also completed in 2009 and constitute a substantial component of the increases seen in the FY 2010 wage and benefit allocation. These increases, necessitated by the disparity between existing College faculty salaries and national data compiled by AACCP, were funded through increased allocations from Academic Affairs and a reassignment of funds previously designated as supplemental faculty. Table 30.2 outlines the general fund budget for the College over the past six years.

**Table 30.2 General Fund Allocations**

General Fund	Actual 05-06	Actual 06-07	Actual 07-08	Actual 08-09	Actual 09-10	Actual 09-10
<b>Budget Allocation</b>	\$474,409	\$520,409	\$532,409	\$532,409	\$ 596,762	\$465,589
<b>Equipment Allocation</b>	\$80,250	\$63,374	0	0	0	0
<b>Wage/Benefit Allocation</b>	\$6,739,269	\$5,914,168	\$6,118,085	\$4,888,338	\$7,097,734	\$7,947,445
<b>Base Increase</b>	\$10,000	0	0	\$64,353	0	0
<b>Budget Transfer in and (out)</b>	\$52,096	(\$34,089)	(\$539,500)	(\$39,834)	\$504,859	0
<b>Carryforward</b>	\$753,796	\$1,126,604	\$819,679	\$1,235,231	\$640,205	\$1,017,550
<b>Sales</b>	\$33,621	\$36,800	\$45,234	\$41,895	\$61,633	\$84,750
<b>One-time Funds</b>	\$7,373	\$2,516	\$5,515	\$7,011	\$284,841	\$5,000
<b>TOTALS</b>	<b>\$8,149,814</b>	<b>\$7,629,782</b>	<b>\$6,981,422</b>	<b>\$6,729,403</b>	<b>\$9,168,034</b>	<b>\$9,520,334</b>

In advance of a 3% reduction in State funding for FY 2011, in February, 2010, the Provost requested all Colleges within the University to develop a budget that reflected a 3% reduction in overall operating expenses. The College, through frequent meetings of the Executive Committee and repeated meetings with the faculty, developed a budget that provides funding for a total of 50.0 faculty FTE within the College – 44.6 FTE Tenure/Tenure-track and 5.4 FTE adjunct (supplemental) faculty. To provide funding for all faculty positions, including six open positions, the College’s supplies and expenses (S&E) budget was re-evaluated and reduced by 15% or approximately \$90,000. Additionally, wages for student assistants in the College were reduced substantially. In total, \$241,405 has been reassigned within the College, preserving the supplemental faculty funding for FY 2011. Alleviating the impact of this reduction, in contrast to past years, salary savings from open positions within the College may be requested to offset costs for student placements and other supplemental faculty costs directly related to the open position. For additional budget details, see appendix 30.1 and 30.2.

The overriding principle in developing the College budget and assessing its adequacy to support the College’s mission is maintaining an appropriate Student:Faculty ratio (SFR) through competitive faculty salaries and adequate supplemental faculty funding. With an approximate total enrollment of 600 students, all budget

projections are based on a total faculty of 50.0 FTE, including tenured/tenure-track and adjunct faculty. Thus, enrollment is supported with an overall SFR of 12 (see Standard 24). In the FY 2011 budget, existing open positions' salaries have been established at \$91,500 to compare favorably with AACCP survey data and, as outlined above, most filled positions within the College have been funded at a level between the 25<sup>th</sup> and 50<sup>th</sup> percentile of the AACCP survey. The 2009 salary adjustments have led to greater stability and satisfaction among the faculty with improved retention and increased success in recruitment. The appointment of the ADSAA has centralized the College assessment efforts and moved forward its overall assessment plan.

Expenditures within the College are devoted to exclusive support of the Doctor of Pharmacy program; this includes both on-campus costs as well as costs related to the off-campus instructional sites. Funding for the lease of the off-campus instructional sites is provided centrally by the University. This single program focus ensures that all pharmacy student fees are applied directly to program costs. However, tuition is collected centrally by the University and allocated to the College.

3) **Comments:** Describe a) areas of the program that are noteworthy<sup>36</sup>; b) the program's assessment of its issues and its plans for addressing them with relevant timeframes; or c) findings that highlight areas of concern along with actions or recommendations to address them:

Working collaboratively with the Provost's office, in 2008 the College undertook an effort to increase active learning within the curriculum. This effort, directed by an outside educational consultant, was funded by the College and the Provost's office. Further, efforts and funding have continued with support for faculty development of active learning teaching methodology. In addition to the existing research funding opportunities through the University, the College's Alumni Board has established a research fund with the first round of proposals due in September 2010. Thus, through the University and the College, faculty members have several possible routes to pursue research funding. Availability of these internal funding sources offsets the general lack of "start-up" packages for new faculty through the College.

The 2008 renovation of the College's auditorium has provided students with an updated learning environment funded through University and College allocations. Ongoing discussions to relocate the current instructional sites in Grand Rapids and Kalamazoo to a single location in Grand Rapids reflect the University's commitment and level of support for the Doctor of Pharmacy program.

Implementation of the 2009 Curriculum has brought with it a substantial increase in the number of practice sites to support IPPEs in community- and hospital-based practice. In addition, the College decision in 2000 to provide payment to institutions precepting APPE patient-care clerkships has added stability to experiential

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• <sup>36</sup> Examples of Noteworthy Areas: Students are in control of the budget for their professional activities.



scheduling. Further, contractual arrangements with several health-systems have resulted in continued and consistent placement of students in required APPEs despite ongoing faculty recruitment.

4) **Quality Improvements:** Write any additional comments to further advance the quality of the program:

Implementation of the FY 2011 budget will be monitored closely to determine if the reallocation of funding will adequately support all College operations. To offset further budgetary reductions, the College, in discussion with University administration, must consider the possibility of additional student fees to maintain appropriate support for the program. The current student fee structure, \$20 per semester with a single, additional first-semester fee of \$75, appears to be below that of other regional institutions.

The administrative structure within the College, with the loss of the Assistant Dean/Department Head, Pharmaceutical Sciences, will require evaluation as the role of the Department Chairs becomes clearer. Although providing direct faculty support, the Department Chairs maintain a substantial teaching load in addition to their administrative responsibilities. In addition, they remain in the faculty bargaining unit, imposing some limitations on their administrative responsibilities.

5) **Final Evaluation:** Using your best professional judgment, evaluate how well the program meets the standard by putting a check in the appropriate box :

Meets the Standard	Partially Meets the Standard	Does Not Meet the Standard
<ul style="list-style-type: none"> <li>• The Executive Committee or equivalent is conversant in all areas of the budget.</li> <li>• Department chairs are responsible for their own budgets.</li> <li>• The budgeting process has internal transparency and faculty understand it.</li> <li>• Financial resources are available in a manner that supports the growth and development of the program and addresses the accreditation standards.</li> <li>• Financial resources are sufficient to support and advance the mission and goals of the program.</li> </ul>	<ul style="list-style-type: none"> <li>• The college or school is overly dependent on insecure or temporary sources of revenue.</li> <li>• The college or school has a plan and is in the process of addressing all issues related to not meeting the requirements of this standard.</li> </ul>	<ul style="list-style-type: none"> <li>• The budgeting process lacks internal transparency consequently, faculty don't understand it.</li> <li>• An "excessive" number of faculty lines are supported by non-sustaining funds or foundation money.</li> <li>• The budget is created outside the college or school without input from the dean.</li> <li>• The college or school has insufficient financial resources to meet the mission and goals of the program.</li> <li>• Significant numbers of faculty resign because of low pay.</li> <li>• Student enrollment exceeds the capacity of physical, financial or educational resources (e.g., in order to bring additional funds into the college or school).</li> </ul>
<input type="checkbox"/> Meets the Standard	<input checked="" type="checkbox"/> Partially Meets the Standard	<input type="checkbox"/> Does Not Meet the Standard

## **VI. Appendices**

## Appendix 1.1

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### MISSION STATEMENT

The College of Pharmacy fosters the development of its students, faculty and pharmacists into practitioners who positively influence the health outcomes of the peoples of Michigan, the Great Lakes region, the nation and the global community.

In achieving its mission, the College of Pharmacy is guided by the Vision and Core Values of Ferris State University and is committed to:

- *Providing the highest quality pharmacy professional education to students and practitioners;*
  - *Promoting the delivery of patient-centered care by pharmacists that are committed to the safe and appropriate use of medications.*
- *Developing and maintaining relationships with alumni, professional associations and the health care industry which advance the goals and objectives of the college and the profession;*
- *The personal and professional development of each faculty member to meet the pedagogical, scholarly and service demands of a dynamic curriculum and profession;*
- *And, the creation of a professional community that embodies the principles of ethics, fairness, honesty, civility and respect for peoples' diversity in ideas, beliefs and cultures.*

**Adopted March 2009**

## Appendix 1.2

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### Department of Pharmaceutical Sciences

#### Mission Statement

The faculty of the Department of Pharmaceutical Sciences is the source of expertise for the delivery of the basic scientific concepts that form the foundation of the profession of pharmacy for our students, practitioners and other healthcare professionals.

These concepts support the College's mission:

- *To deliver patient-centered and population-based care through optimization of medication therapy and the promotion of wellness;*
- *To continue to actively engage students in acquiring the critical-thinking skills that will give them the ability to use these concepts in their future courses and clinical experiences, as well as in their careers as pharmacists;*
- *The department faculty and students shall be involved in service and scholarly activities that broadly support the public's health, the profession of pharmacy, the college, and the university;*
- *These activities support the creation of a professional community that embodies the principles of ethics, fairness, honesty, civility and respect for diversity in peoples' ideas, beliefs and cultures.*

Approved by the faculty of the Department of Pharmaceutical Sciences on October 27, 2009

**PHARMACY PRACTICE DEPARTMENT  
MISSION STATEMENT**

*The Mission of the Pharmacy Practice Department is to improve health care through the delivery of innovational pharmacy practice education, patient-centered care, service and scholarly activity.*

*We achieve this mission by:*

- Preparing students to be effective practitioners for the 21<sup>st</sup> century through a curriculum that balances both classroom and experiential education using a variety of validated pedagogical techniques
- Appointing and retaining well trained faculty that can create and maintain progressive practice models
- Supporting the development and advancement of faculty through strong mentorship and educational endeavors
- Engaging students in an interdisciplinary approach to patient-centered pharmacotherapy and public health
- Inspiring professional and academic citizenship
- Developing clinical practitioners capable of discovery, dissemination and integration of new knowledge in practice and teaching

June 2007

## Appendix 2.1a

### College of Pharmacy 2009 Strategic Plan

#### Goal and Action Steps

Strategic Planning Committee Members: Jeffrey Bates, Michael Bouthillier, Robert Krueger, Stephen Lee, Ken McMullen, Sarah Raguckas, Stephen Durst

Goal and Action Step	Desired Outcomes	Additional Alignment with Strategic Plan Initiative and/or Divisional/College Goals	Reason for Goal (including but not limited to assessment data, accreditation requirement, advisory board recommendation, etc)	Start Date	Completion Date	Measure of Success	Collaborators (if any)
<b>Overarching Goal: Personnel Resources</b>							
Goal 1: Recruit and retain appropriate faculty and administrative staff		Goal 1.5					
Action Step 1: Fill existing open faculty positions with competitive salaries	Post, recruit, and hire all open faculty positions (7)	Goal 1.3, 1.4 2.1	Accreditation standards and curriculum	Underway	August, 2009	Number of positions filled and credentials of appointee	
Action Step 2: Implement competitive salaries for all College Faculty and Administrative Staff based on current AACP data	Complete all salary adjustments	Goal 1.4 2.3	To attract and retain faculty expertise for existing and newly adopted curriculum	Underway	July, 2009 (or earlier)	Alignment and consistency with AACP 2008-09 Salary Survey Data	
Action Step 3: Fill existing administrative positions within college with competitive salaries	Post, recruit and hire all open administrative positions (2)	Goal 1.4 2.1, 2.3 5.5	Accreditation standards	Underway	July, 2009 (or earlier)	Number of positions filled and credentials of appointee	
Goal 2: Assess the need for new faculty, staff and administrative positions within the College based on ACPE requirements		Goal 2.1					
Action Step 1. Evaluate and establish appropriate new faculty positions based on accreditation standards (faculty:student ratio)	Finalize accreditation outcomes Evaluate and establish new collaborative opportunities	Goal 1.4	To attract and retain faculty expertise for existing and newly adopted curriculum	Underway	August 2010	New opportunities established, and faculty hired Accreditation granted	Other colleges within the university Local Healthcare facilities Regional research entities
Action Step 2: Support expanded assessment requirements through establishment of an assessment officer position	Identify the roles and activities Hire the individual	Goal 1.1, 1.3 2.2, 2.6	Accreditation standards	Underway	August 2009	Officer hired Assessment data gathered and evaluated	Other colleges within the university Local Healthcare

							facilities Regional research entities
Action Step 3: Establish an office of Experiential Education to support all levels of experiential coursework and adjunct faculty	Identify the activities of the office Identify the number of positions and the qualification of personnel Hire the stated individuals	Goal 1.2, 1.4 2.4, 2.5 5.4	To attract and retain faculty expertise for existing and newly adopted curriculum	Underway	August 2009	Officers hired Office in initial stages of operation Feedback from preceptors Satisfy the experiential demand of the curriculum Expand the number and diversity of offerings	Preceptors (Faculty and non-faculty)
Action Step 4: Assess the need for an office/committee of Intellectual and Faculty Development to support the expectations of faculty and students	See appendix 8	Goal 1.1, 1.4 2.5, 2.6 5.2, 5.3, 5.4	To attract and retain faculty expertise for existing and newly adopted curriculum Accreditation standards	August 2009	August 2010	Identify the committee members and personnel	Additional FSU Colleges

Goal and Action Step	Desired Outcomes	Additional Alignment with Strategic Plan Initiative and/or Divisional/College Goals	Reason for Goal (including but not limited to assessment data, accreditation requirement, advisory board recommendation, etc)	Start Date	Completion Date	Measure of Success	Collaborators (if any)
<b>Overarching Goal: Facilities (Physical Resources)</b>							
Goal 1: Provide needed upgrades in College facilities to support faculty and student research and scientific learning activity		Goal 1.3, 1.5, 1.6, 3.3, 4.3, 5.2, 5.4, 5.5					
Action Step 1. Obtain the necessary equipment and facilitate the formation of a core equipment resource for college- and university-wide use	Develop a comprehensive campus-wide equipment list including animal facilities (Arts/Sciences, Optometry); Develop a policy for collaborative use of all University equipment Budget for and purchase needed core equipment	Goal 1.3, 4.3, 5.2, 5.4	Accreditation standards (student exposure to research activities) Accelerated Learning initiative within the College and Academic Affairs Introduce students to functional aspects of pharmacy practice to better prepare them for experiential placements Growing movement toward simulation in health care teaching (i.e. high-tech mannequin)	Spring, 2009	May, 2010	Completed listing/registry Policy developed Proposed budget developed	Additional FSU Colleges



Action Step 2. Obtain necessary resources and technologies to enhance student learning and support accelerated learning	All elements of new curriculum supported with appropriate equipment/facilities Adoption of Accelerated Learning pedagogy supported with needed equipment	Goal 1.3, 1.5 4.3 5.5	Accreditation standards (delivery of curriculum using active learning strategies) Accelerated Learning initiative within the College and Academic Affairs Aseptic Practice Standards – 797 for preparation of all parenteral products	May, 2009 – initiate faculty training August, 2010 – training completed with introduction of concepts into classroom	May, 2011	Number of courses utilizing Accelerated Learning methodologies	Academic Affairs
Action Step 3. Restore/renovate existing laboratory spaces within College of Pharmacy	Renovation of labs and model pharmacy for student use in newly developed courses Rooms to be returned to functionality or renovated: 112, 116, model pharmacy, 212, 312a, 202a, manufacturing lab, sterile products lab	Goal 1.3, 1.5, 3.3 4.3 5.5	Accreditation standards (delivery of curriculum using active learning strategies) Accelerated Learning initiative within the College and Academic Affairs Aseptic Practice Standards – 797 for preparation of all parenteral products	August, 2009 – comprehensive plan with prioritization of renovations	January, 2011	Enhanced utilization of existing lab space to support new curricular components Operational Model pharmacy, Establishment of an archival area separate from stockroom Establishment of a simulation lab with functional mannequin Operational manufacturing lab Operational sterile products lab (797 Compliant)	Individual practitioners and alumni Healthcare foundations

Action Step 4. Regain use of existing spaces within College through removal of excess materials	Eliminate collected materials from: Model Pharmacy Offices, Model Pharmacy stockroom, Loading dock and lower level office spaces	Goal 4	Implementation of new curriculum and pedagogy requires increased utilization of all spaces within college Existing spaces provide needed physical resources for laboratory experiences	May, 2009	August, 2010	All identified spaces returned to appropriate level of utilization	
Action Step 5. Further develop off-campus instructional sites with appropriate stakeholders/partners	Additional sites available for students in both IPPE and APPE placements Emphasis of site development near campus (25 to 50 miles) to reduce campus-based student travel	Goal 1.3, 1.6 4.3 5.4, 5.5	Accreditation standards (experiential requirements) Ongoing student requests for locations near campus	May, 2009	May, 2011	Student placements at desired locations based on preferences Increased student evaluations of experiential assignment opportunities	Regional health care systems Community pharmacies
Action Step 6. Establish necessary agreements with MSU-CHM for co-location of entire P-3 class in new Secchia Center	Completion of lease arrangements prior to expiration of existing agreements in Grand Rapids (MERC) and Kalamazoo (WMU)	Goal 1.3, 1.6, 4.3	Enhanced academic opportunities P-3 class in single location Curricular collaboration with CHM, strengthening programming Expiration of existing leases at off-campus instructional sites coincides with opportunity for co-location with CHM in new Grand Rapids Medical Mile	May, 2009	June, 2010	Offices and classrooms currently affiliated with MERC and WMU relocated to new Secchia Center with CHM	Alumni Additional healthcare stakeholders

Goal and Action Step	Desired Outcomes	Additional Alignment with Strategic Plan Initiative and/or Divisional/College Goals	Reason for Goal (including but not limited to assessment data, accreditation requirement, advisory board recommendation, etc)	Start Date	Completion Date	Measure of Success	Collaborators (if any)
<b>Overarching Goal: College Culture</b>							
Goal 1 : Implement revised doctor of pharmacy curriculum							
Action Step 1: Develop and implement plans for the following: <ul style="list-style-type: none"> <li>• course coordination and instruction responsibilities</li> <li>• equipment and facility upgrades</li> <li>• secure needed instructional resources</li> <li>• remediation/transition process</li> </ul>	Complete curriculum revisions for P1-P4 years Complete all workload assignments Complete plan for transition to new curriculum Complete plan for student remediation over curricular transition period Complete all currently underway classroom renovations (101, 314)	Goal 1.1,1.3, 1.5, 4.3	Accreditation standards	Underway	August, 2012 or earlier	Revised curriculum will be in place and meet accreditation standards	

Goal 2: Establish an appropriate enrollment process							
Action Step 1: Identify and establish appropriate support personnel and procedures to assist with the following areas of the enrollment process: <ul style="list-style-type: none"> <li>• Recruitment</li> <li>• Interview/Admissions</li> <li>• Retention</li> </ul>	A standardized procedure for enrollment that includes all required components (ref ACPE Standards 2007) and that provides candidates with timely notification of their status	Goal 2.1, 2.2, 5.5	Accreditation	Underway	Preliminarily March, 2009 (additional revisions expected)	Administrative position is filled and a standardized procedure is developed	
Goal 3: Create a comprehensive Vision, Mission, Goals and Value statement for the College							
Action Step 1: College Accreditation Committee to update existing mission statement based on University statements	Mission statement that accurately reflects the college	Goal 1.3	Accreditation	Underway	May, 2009	Updated Mission Statement is approved by college faculty and posted	

## Appendix 2.1b

Provost's	Strategic Planning Initiative	Specific Action Steps	Collaboration Needed	Impediments	Personnel/Funding Required (Itemize)	Timeline	Assessment/Results/Outcomes - Provide data that leads to this action and the measures to be used to evaluate its success
<b>Major Goals (Strategic Planning)</b>							
<b>Goal One</b> - Become a demonstrable center of excellence in educational quality and student learning.	1. <b>Enhance assessment and the use of assessment data at the program and course level to measurably improve student learning.</b>	1. Continue expansion of TracDat applications for all courses in College. 2. Implement student reflective assessments throughout all four professional years. 3. Expand Assessment Committee involvement in TracDat.	1. TracDat Implementation Committee 2. Full faculty participation is essential	Continuing development of the College's assessment culture	n/a	Ongoing	Expansion of assessment metrics to encompass all aspects of program
	3. <b>Enhance the availability of scholarships, including graduate and need-based, and respond effectively to donors.</b>	1. Continuation of College's successful scholarship program and donor development.	Continued donor support and collaboration with University Marketing and Advancement	Economic climate		Ongoing	Quantify scholarship availability and amounts
	7. <b>Review the curriculum and increase the emphasis on preparing students for a global society and leadership roles.</b>	1. Accreditation requires continued assessment of curriculum content to meet ACPE standards. 2. Maintain international student exchange programs with the University of Bath and the University of Angers. 3. Expand global mix of students within College. 4. Support faculty and student participation and leadership in national professional organizations.	Continued reliance on non-general fund sources.	Limited availability of external funding and continuously expanding need.	None	Ongoing	1. Number of International students. 2. APRC/ACPE accreditation compliance and ACPE/AACP Alumni Survey results. 3. Number of students and faculty participating in organizational/leadership roles. 4. Student participation in professional organizations following graduation.
	8. <b>Develop and implement a plan for the Ferris State University online environment.</b>	1. Expanded offering of selected required courses in web-enhanced format. 2. Exploration of elective courses offered exclusively online 3. Explore hybrid course development to augment experiential course offerings.	Instructional design support including ACPE (accreditation) consultations.	Accreditation standards limit utilization of technology-based/simulated methodology	1. Instructional design consultation. 2. Faculty development costs. 3. IT/IS development costs. 4. Infrastructure costs	Ongoing	1. ACPE approval. 2. SCH production. 3. Educational outcome assessment of standard methodology v. online format.
<b>Goal Two</b> - Develop a University community where all are valued, welcomed, and informed.	1. <b>Implement and sustain the Ferris State University Diversity Plan. Please speak specifically to increasing a diverse student and staff population.</b>	1. Diversity Committee incorporating a Diversity Panel to address inclusion issues within the College. 2. Diversity Plan in place within the College including analysis of demographic data. 3. Recruitment efforts increased to achieve broad representation of underrepresented minorities in students, faculty and staff. 4. Initiation of the Walgreen's Minority Scholarship within the College.	University Office of Diversity and Inclusion	Rural locale of the University coupled with a nationally low rate of many minorities in the pharmacy profession	1. Continued development of scholarship sources. 2. Additional recruitment funding for increased visibility among minority populations.	Ongoing	Student and Faculty demographics
	2. <b>Enhance the quality of external and internal responsiveness across the institution.</b>	1. Continued growth, qualitatively and quantitatively, of adjunct faculty (now in excess of 350) with emphasis in IPPE courses. 2. Ongoing preceptor professional development programming. 3. Active participation in campus-wide initiatives. 4. High-level of visibility within state and national professional organizations. 5. Exemplary relationship with College alumni (ex: Annual Spring Seminar)	Continued alumni and professional collaboration	Heterogeneous program offerings of the University lead to misperceptions	n/a	Ongoing	ACPE/AACP Accreditation surveys including graduates, preceptors and alumni

	7	Enhance the sense of community for everyone at Ferris State University, including those attending or working online and at all FSU sites.	Minimize inconsistency between on-campus, Grand Rapids and Kalamazoo instructional sites and clinical practice sites throughout the state. Appointment of Assistant Dean for Student Affairs and Assessment in August, 2015, to coordinate student services group. Facilitate stronger relationships between faculty and students. Enhance collaboration between faculty members and between faculty and alumni.	Extension network of instructional sites and clinical practice sites.	State-wide distribution of faculty and students leading to increased resource utilization for maintenance of an accredited program.	Minimize an adequate funding and personnel base to assure quality programming for all students.	Ongoing	1. Internal student evaluations from all sites. 2. ACP/AACP graduate, preceptor and alumni survey results. 3. Maintain adequate funding and personnel base to assure quality programming for all students.
	10	Develop and implement a plan to enhance retention.	1. Improve the newly implemented process for personal interviews for admission of all applicants. 2. Explore methodology and pedagogy for offering an efficient, flexible remedial program for students experiencing academic difficulty.	Existing faculty appointments support remedial programming. College culture supports successful completion of program for all deserving students.	Increasing curricular complexity reduced opportunities for timely remediation programming.	Summer scheduling required for remediation programming. Enhance faculty-student advisor program.	Ongoing	On-time graduation and total graduation numbers.
Goal Three: Enhance the financial position of the institution.	7	Increase university and college budget transparency.	Recent transparency sessions, both within the College and the University, have increased faculty awareness of budgeting practices and challenges. Continued efforts to expand transparency in College and Departmental activities and between faculty and staff.	Continued University-wide discussions in light of State budgeting challenges.	None	None	Ongoing	ACPE/AACP Faculty Survey
Goal Four: Provide a state-of-the-art, sustainable and safe learning, living and working environment.	4	Upgrade lab spaces and classrooms based on the identified needs of the users.	1. Complete Grand Rapids relocation for P3 to increase programmatic offerings. 2. Renovate Sterile Administrative Laboratory.	Office of Academic Affairs	Higher Education budgetary limitation	Refer to project plans	1-2 years	1. Completion of Grand Rapids relocation. 2. Sterile Administrative Laboratory completion.
Goal Five: Foster collaborative internal and external working relationships.	5	Develop and implement strategies for increasing collaboration among and within divisions, colleges and programs.	1. Further enhance Joint Pharm.D./MBA degree articulation. 2. Expand interdisciplinary education on campus through expansion of Nursing/Pharmacy/Cosmetology Diabetes Management Clinic. 3. Continue Community Health Fairs in collaboration with MCC and CAHS.	Continue inter-disciplinary training	Curricular limitations based on alignment and scheduling	None	Ongoing	1. Number of students involved. 2. Achievement of improved health care outcomes for patients. 3. Development of co-curricular opportunities and assessment criteria.
	4	Develop and implement a comprehensive plan for the University's community to encompass the activities of its members engaged in volunteer service and outreach initiatives.	Registeral student volunteer activities within the Student Activity Center to streamline and quantify participation in outreach initiatives.	Student Activities Center	Communications between all instructional sites and students	None	Immediate implementation	1. Student volunteer hours. 2. Recognition of student organizations. 3. Increased participation by students.
	5	Enhance relationships with industry, business, other educational institutions and government. Please speak specifically to the development and expansion of a culture of entrepreneurship and innovation.	Expansion of existing strong external support to the College including adjunct faculty appointments, clinical practice affiliations and financial/donor support.	Maintenance of excellent relationship with all College stakeholders	Tightening of health care financing and diminished commitment and support of education	Increased funding to support experiential placements in the future.	Ongoing	AAHP/AAHP Preceptor and Student Experiences, increase the number and quality of demonstration projects, pilots grants and faculty and student recognitions with external organizations.
	6	Enhance outreach to inform, support, and educate students about higher education, its processes, career possibilities, and Ferris. Please speak specifically to external funding (i.e. grants and contracts).	Increased recruitment activities through the College's Student Services Office with revision of print and social media resources. Expansion of recruitment focused on minority populations as a result of Walgreen's investment activities.	Increased collaboration with Admission Office	Limited funding in an environment of increased competition	None	Ongoing	Recruitment and enrollment demographic data.

Goal Six-Foster Innovation and Improve processes to move the University forward.	1	<b>Enhance programs to develop leadership for faculty, staff, and administration.</b>	1. Appointment of a College Professional Development Committee. 2. Appointment of Departmental Chair for each Department. 3. Annual attendance support for faculty to participate in AACCP Institutes. 4. Professional development support for all faculty to attend national meetings in their assigned area. 5. Receipt of Target Corporation grant to develop student leaders.	Collaboration with FCTL Continued grant support	Faculty and fiscal resources required. Faculty schedules preclude participation.	Continued funding and personnel commitments.	Ongoing	Participation date
	3	<b>Designate a standing "blue sky" committee to review market trends, identify opportunities and work with appropriate leaders and structures to facilitate the development of innovative programs.</b>	1. Reorganize National Advisory Council. 2. Maintain a thorough understanding of changing accreditation standards. 3. Monitor pharmacy manpower demands of the State and Nation. 4. Establish regular discussions with faculty for input in College operations	Recruitment of additional members of the National Advisory Board from pharmacy stakeholders	Identification of interested participants	Support of National Advisory Board meetings	1 year	Reorganization of National Advisory Board
	5	<b>Enhance personnel evaluation processes and the related performance improvement methodologies, keeping the University informed about those processes.</b>	Explore personnel evaluation processes within College Executive Committee to identify elements of evaluation and timeline.	Obtain summary of processes from other colleges and departments	History of unsuccessful efforts in personnel evaluation	None	1 year	Implementation of a standardized evaluation process for College.

18 Mar 10

## Appendix 3.1

### Appendix 3.1: Ability-Based Outcomes for TracDat System

Outcome Name	Outcome
Communication (Level 1)	Demonstrate basic communication skills and assess the quality of communication performance in situations involving reading, listening, writing, speaking, and use of data, media, and computers.
Communication (Level 2)	Demonstrate improvement in basic communication skills and exhibit creativity in communication situations through the use of reading, listening, writing, speaking, and use of data, media, and computers.
Communication (Level 3)	Communicate clearly, accurately, compassionately, confidently, effectively and persuasively using a variety of methods (i.e. reading, listening, writing, speaking, and the use of data, media, and computer skills) and with a variety of target audiences.
Health Promotion (Level 1)	Describe the basic elements of emergency care and health promotion.
Health Promotion (Level 2)	Provide emergency care and develop health promotion services.
Health Promotion (Level 3)	Provide health promotion services in accordance with social, professional, ethical, and legal guidelines.
Patient-Specific and Population-based Disease Management (Level 1)	Gather, organize and evaluate information in order to provide patient-specific and population-based disease management.
Patient-Specific and Population-based Disease Management (Level 2)	Analyze patient information in order to provide patient-specific and population-based disease management.
Patient-Specific and Population-based Disease Management (Level 3)	Implement, monitor, evaluate, adjust, document and communicate the patient-specific and/or population-based disease management plan.
Preceptor Preparation, Communication and Feedback	Program preceptors receive timely communications on student objectives, College policies, criteria for performance and evaluation.
Problem Solving (Level 1)	Describe critical-thinking processes and the scientific method and apply them in developing solutions to simple problems.
Problem Solving (Level 2)	Identify and analyze ideas and problems of increasing complexity, generate defensible solutions, and establish criteria for evaluation of solutions.
Problem Solving (Level 3)	Make decisions regarding complex problems that require an integration of one's ideas and values within a context of scientific, social, cultural, and ethical issues.
Professionalism (Level 1)	Recognize the role of values in personal and professional interactions. Maximize learning through the use of effective personal learning strategies.
Professionalism (Level 2)	Evaluate personal and professional conduct according to ethical theories and principles. Improve personal performance through assessments by self and others.
Professionalism (Level 3, Part 2)	Complete learning activities on an ongoing basis for personal and professional development based upon self-determined areas of deficiency and/or interest.
Professionalism (Level 3; Part 1)	Adopt or construct ethical principles and use them as a guide for one's actions.
Systems Management (Level 1; Part 1)	Specify elements necessary for purchasing, preparing, dispensing, distributing and administering medications and maintaining adequate inventory control.
Systems Management (Level 1; Part 2)	State the components necessary to manage DIFFERENT TYPES OF pharmacy operations with consideration of management principles, law and ethics.
Systems Management (Level 2, Part 1)	Identify and analyze characteristics associated with purchasing, preparing, dispensing, distributing and administering medications and maintaining adequate inventory control.
Systems Management (Level 2, Part 2)	Demonstrate advanced skills in managing pharmacy operations, human resources, logistics fiscal management, law and ethics.
Systems Management (Level 2, Part 3)	Identify the elements of, and develop systems for the reporting of medication errors and ADR's, for the conduct of DUE, and for the maintenance of a formulary system.



Systems Management (Level 3, Part 1)	Apply information regarding purchasing, preparing, dispensing, distributing and administering medications and purchasing other supplies to optimize pharmaceutical care.
Systems Management (Level 3, Part 2)	Apply management principles to effectively manage a pharmacy operation, including resources, facilities, and equipment.
Systems Management (Level 3, Part 3)	Actively participate in the management of medication use through the reporting of medication errors and ADR, conducting and presenting DUE, and preparing and delivering formulary recommendations.

## Appendix 3.2

### Appendix 3.2: Programmatic Outcomes

Outcome Name	Outcome
Academic Advising	Students receive academic advising that meets their needs through the program.
Advanced Pharmacy Practice Experiences - Logistics	The procedures for assignment to advanced pharmacy practice experiences are perceived by the students as working well.
Advanced Pharmacy Practice Experiences - Quality	The program will maintain and adequate number and mix of high quality advanced pharmacy practice experience sites, for which the students will be properly prepared.
Career and Post Graduate Preparation, Life-long learning and Program	Graduates receive preparation for career or post-graduate training; responsibility for their own learning; and have positive perception of program and College of Pharmacy
Content Evaluations Part 1	Coursework within a semester lacks unnecessary duplication.
Content Evaluations Part 2	Coursework within a semester is reasonable coordinated between classes.
Cultural Diversity	The College of Pharmacy provides an environment that understands, respects and values diversity.
Curricular Outcomes, Sequencing and Integration	The PharmD curriculum has readily apparent outcomes and follows a logical sequence with integration.
Diverse Active Learning Strategies	The PharmD program offers diverse opportunities for learning including active learning strategies (e.g. laboratories, recitation, in-class activities, etc.).
Diverse Elective Offerings	The program has diverse electives available to students at multiple points in the curriculum.
Facilities and Educational Resources	The program offers classroom, computer labs, resources, study areas and common spaces to meet the needs of students.
Introductory Pharmacy Practice Experiences - Logistics	The procedures for assignment to introductory pharmacy practice experiences are perceived by the students as working well.
Introductory Pharmacy Practice Experiences - Quality	The program will maintain and adequate number and mix of introductory pharmacy practice experience sites, which include exposure to direct patient care under appropriate supervision.
Licensure Exam Pass Rate	Students will be prepared to successfully complete the North American Pharmacist Licensing Exam (NABPLEX) and Multistate Pharmacy Jurisprudence Examination (MPJE).
Organization and Administration	The College of Pharmacy's organization, support, relationships, practices, leadership and governance function in a manner that fosters its mission and goals.
Student Experience - Academic and Professional Misconduct	A system will exist for addressing individual issues of academic and professional misconduct.
Student Experience - Admissions Procedures and Orientation	Admissions requirements are outlined for students with clear expectations. An orientation is presented, which provides students with an overview of important issues and policies.
Student Experience - Communications	There will be effective means of communication of about news, events and information for the students for the professional program; as well as post-graduate opportunities.
Student Experience - Student Governance and Representation	There will be a structure in place for student input to important College committees; as well as a governance structure for them to address concerns.
Student Services	Students receive adequate career planning, tutoring, financial aid advising, and health and wellness services.



FERRIS STATE  
UNIVERSITY

*Imagine More*

## **REQUEST FOR INSTITUTIONAL CHANGE**

**Accreditation of New  
Instructional Site - International**

Submitted to the Higher Learning Commission  
of the North Central Association

Revised February 6, 2008

[www.ferris.edu](http://www.ferris.edu)

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## **SECTION 4: IMPACT OF PROPOSED CHANGE ON CHALLENGES IDENTIFIED BY THE LAST COMPREHENSIVE VISIT**

There are no negative impacts to result from this change on areas of challenge identified in the last comprehensive visit. A report on the status of these challenges was presented to a subsequent visiting team that evaluated the institution for the offering of fully online degrees. The University continues to extend its progress on each of the issues as we prepare for reaccreditation in 2010-11. A brief synopsis of this progress is offered below.

### ***Challenges Related to the Proposed Change and Institutional Response***

The last comprehensive evaluation of Ferris State University was completed March 26-28, 2001. The expansion of international programs will build upon several strengths noted in the site-visit team report as well as serve as an extension of some of the study's advice and suggestions. The following sections review the findings identified in 2001 and our current status on each.

***Related Strengths Identified.*** Ferris received high marks for its inclusive planning process that was found to be well conceived and executed and that serves as a primary strength of the institution. Enrollment management initiatives, including a strategic marketing plan as well as a comprehensive, integrated array of support services, were also cited as institutional strengths. Additionally, the team suggested, an “entrepreneurial spirit should be advanced through the university that reflects the dynamic opportunities available through the Extended Learning Department.” The University, through its inclusive planning processes, has positioned itself to act upon its mission to become a regional, national, and international leader in the delivery of career-oriented, technical, and professional education. The University Center for Extended Learning, the fastest growing unit within the University, continues to exhibit its entrepreneurial spirit in expanding educational options for learners through collaboration with Ferris colleges and partners throughout Michigan and beyond. Their student support services will be critical components to this international offering, and they have the experience in doing so with our Red River programming in Winnipeg, Manitoba.

### *Addressing Previous Concerns*

Ferris has taken seriously the challenges identified by the 2001 comprehensive team and offers the following summary updates:

*Concern 1:* The team reported that “While there has been considerable improvement, there continues to be inconsistency in administration and expectations across departments related to general education requirements, particularly in regard to rigorous application of criteria to designate general education courses.”

*University Response:* General education criteria are consistently administered. The earlier concern has been addressed in multiple ways. First, to make more clear and consistent the application of stated criteria for general education course designation, several General Education Outcomes Assessment Committees have clarified and refined their stated criteria. Second, to improve consistency in administration and expectations for general education requirements across departments, any requests for general education waivers or substitutions must be considered by the Assistant Vice President for Academic Affairs, a position presently held by Donald Flickinger. This second change, in particular, is further evidence of a general education strength noted by the NCA team in 2001: “[t]here is strong support ... for GE by the Vice President for Academic Affairs ....”

Third, general education committees continue to function actively in reviewing criteria and the possible inclusion of additional offerings. Current emphasis focuses on the assessment of learning for the identified general education outcomes.

Fourth, general education is front and center in the attention of the Office of Academic Affairs with emphasis upon documenting learning outcomes. To learn more about the Ferris general education program, consult <http://www.ferris.edu/htmls/academics/gened/gened.html>

The concern noted by the NCA team in 2001 is not an issue related to this proposal since initially we propose to offer the masters’ degree, so the earlier general education concern does not apply and has been sufficiently addressed for undergraduate programs.

*Concern 2:* The University needs to resolve differences which exist in the general education requirements between FSU and Kendall College of Art and Design.

*University Response:* Although Kendall College is accredited under the umbrella of Ferris State University, it also maintains a separate identity because of its distinctiveness as a nationally recognized art school. A part of this differentiation is the fact that Kendall College of Art and Design has a different general education program than that of Ferris. Kendall also hosts its own assessment procedures and has independent structures dedicated to the evaluation and implementation of effective general education in keeping with its semi-autonomous position within the university. That general education information is available to the team on

the Kendall website at <http://www.kcad.edu/>. Kendall is also planning to pursue international programs, consistent with the expansion of the global market for design, among other services.

*Concern 3:* The University should develop an institutional replacement cycle for its technology infrastructure as well as provide resources for maintenance and upgrades of its software programs, staffing, and training/development to keep technology personnel current.

*University Response:* Technology enhancement and the development of replacement plans have taken a prominent position in institutional planning. Efforts to update equipment to meet standards have resulted in great improvements in the currency of technology in classrooms and at staff workstations. Further, restructuring in the services area for Information Technology has resulted in highly favorable results in improved service levels.

Most campus computers are running the latest versions of supported software. Part of this attention to technology has come from the technology interest of President Eisler. Under his leadership, reorganization, renewed planning, and budget commitment toward implementation of new campus IT systems have been achieved and new administrative and learning content systems have been implemented in the past two years. Technology is in good shape at Ferris.

The University will address these 2001 concerns in greater depth with the preparations for the next comprehensive visiting team in 2010-11.

The team identified the following statements of evidence in support of the institution's request in its 2006 visit to the campus evaluating the request for fully online programs:

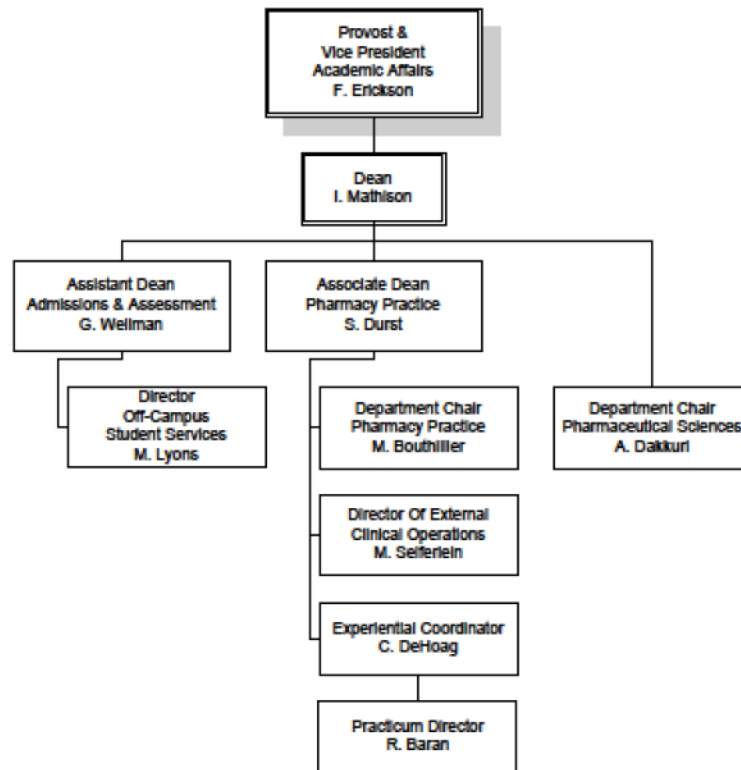
- The proposed change is consistent with the mission, history, and strategic plan of Ferris State University
- Ferris State university has a significant number of articulation agreements and extensive experience with off-campus site management
- The University engaged in regular strategic planning of which the proposed change is a key component.
- There are formal review mechanisms in place including Program Review (6-year cycle), assessment of student outcomes, and yearly administrative reviews of programs.

A subsequent satellite campus visit in 2007 also resulted in positive reviews of the University's off-campus operations.

## Appendix 5.1

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**FERRIS STATE UNIVERSITY**  
*ACADEMIC AFFAIRS DIVISION*  
COLLEGE OF PHARMACY





**Policy Statement on Standing, Procedural, and Ad Hoc Committees  
Ferris State University, College of Pharmacy  
Adopted 5/13/03**

**Committees**

***Standing committees of the College of Pharmacy are:***

**1. Accreditation (approved amendment 8-22-05)**

- A. Term length and limit: 4 years alternating for faculty. One cycle can be repeated (8 consecutive years max)
- B. Members: 2-Pharmaceutical Sciences, 2-Pharmacy Practice, 2-Administrators 1-P1/P2 student and 1-P3/P4 student.
- C. Terms will be staggered so as to replace one new faculty person yearly (one year Science, one year Practice). Students will be replaced as they graduate (start with a P1 and P3 and replace with P1's).

**Charges:** Responsibilities include responding to requests from ACPE for progress reports, documentation, etc. in order to maintain the accreditation of the College, as well as coordinating the Self- study reports necessary for re-accreditation visits. And responding to/ coordinating other types of accreditation/review processes such as the University's Academic Program Review.

**2. Admissions**

- A. Each committee member will have a three-year term limit except for the administrator serving on this committee.
- B. Members: 2-Pharmaceutical Sciences, 2- Pharmacy Practice, 1-Administrator, 1-P1/P2 student and 1-P3/P4 student.
- C. The chairperson of this committee shall be the administrator responsible for admissions for the College of Pharmacy.

**Charges:** All matters related to admissions to the College of Pharmacy including interviewing, determining the criteria/standards for selection, evaluating, and ranking of all students applying for admission or readmission.

**3. Assessment Committee**

- A. Term length and limit: 3 years, alternating
- B. Members: 3-Pharmaceutical Sciences, 3-Pharmacy Practice, 2- 1 Administrator from each Department

- C. Terms will be staggered so as to replace one new person from each Department yearly.

**Charges:** Responsible for assessment of any function of the College of Pharmacy (COP) supporting the mission statement including but not limited to: curriculum, finances, physical plant, personnel, outcomes, graduates, etc. This may be accomplished by direct action of the Assessment Committee or through cooperation/direction involving other appropriate COP committees in charge of the area being assessed.

#### 4. Awards

- A. There is no term limit for this committee.
- B. Members:

- 1. For the Honors Convocation: P4 Class advisors

**Charge:** Evaluation of the awards structure/criteria when appropriate and selection of the recipients for the various awards.

- 2. For the White Coat Ceremony: P2 Class advisors

**Charge:** To assist the office of the Dean in organization and presentation of the White Coat Ceremony.

#### 5. Continuing Education

- A. Each committee member will have a three-year term limit except for the administrator/Director serving on this committee.
- B. Members: 2-Pharmaceutical Sciences, 2-Pharmacy Practice, 1-Administrator or Director of Continuing Education, and 1-Adjunct faculty member.
- C. The committee will appoint the adjunct faculty member.
- D. The chairperson of this committee will be the Administrative representative or the Director of CE.

**Charge:** Develop, coordinate and evaluate all the continuing education programs affiliated with the College of Pharmacy.

#### 6. Curriculum

- A. Term length and limit: 3 years alternating for faculty and students (if possible for students).
- B. Members: 3-Pharmaceutical Sciences, 3-Pharmacy Practice, 1-Administrator 2- students [1-P1/P2 and 1-P3/P4] (non-voting members), 1-Alumnus. If the COP UCC representative is not an official member of the curriculum committee, s/he shall be an ex-officio member.
- C. Terms will be staggered so as to replace one new person from each Department yearly.

**Charges:** Responsibility for overall curriculum review and outcomes assessment (with direction from the Assessment Committee). Provide direction for needed course changes. Bring recommended curriculum revisions to the faculty for approval.

## **7. Experiential Review Committee (approved amendment 8-23-04)**

- A. Members will be appointed for a two-year term, with initial terms of membership either two or three years to ensure a continuous membership. Members may be reappointed for a total of three full terms. Partial terms will not be counted toward the limit.
- B. The membership will include practitioners from all common practice areas with unconventional areas represented based on externships and clerkships offered by the College. Committee membership will range from 10 to 12 members in addition to College representatives. Committee members representing the College include the Assistant/Associate Dean of Pharmacy Practice, the Experiential Coordinator, and additional staff members as required.
- C. The Experiential Review Committee will annually, at its first meeting following June 30<sup>th</sup> of each year elect new officers. Election of officers will occur by secret ballot. Officers in the Committee include:
  - Chair
  - Vice-Chair
  - Secretary

**Charges:** The Experiential Review Committee is formed in compliance with the American Council on Pharmaceutical Education (ACPE) Accreditation Standards 2000 to assist the College in designing, implementing and assessing its experiential education program. The Committee will be responsible for regular assessment of the P-1 through P-4 early and advanced practice experiences through appropriate evaluation of assessment instruments. Evaluation of both content and facilities will be conducted to ensure that all conditions, specified by the College of Pharmacy, are met and sustained for the delivery and practice of Pharmaceutical Care. In addition, the Committee will regularly provide recommendations to the College regarding the design and conduct of the experiential program and the development and training of the College's Adjunct faculty. The Committee, through its Chair, will work directly with the College's Assistant/Associate Dean of Pharmacy Practice and the Experiential Coordinator with further reporting to the appropriate College Standing Committee.

## **8. Professional Development (approved amendment 5-14-07)**

- A. Term length: 2 years, alternating
- B. Members: 2-Pharmaceutical Sciences, 2-Pharmacy Practice, 1-Administrator (no term limit), 1-Ad Hoc member from the Faculty Center for Teaching & Learning (non-voting member)
- C. Terms will be staggered so as to replace one new person from each Department yearly

### **Charge:**

Develop, coordinate, and evaluate professional development programming for all College of Pharmacy faculty.

## **9. Progressions and Academic Standards**

- A. Each committee member will have a three-year term limit except for the administrator.
- B. Members: 3-Pharmaceutical Sciences, 3- Pharmacy Practice, and the administrator in charge of academic affairs. The assistant to the administrator in charge of academic affairs will serve as a non-voting, ex-officio member.
- C. The Chair will be the administrator in charge of academic affairs.

**Charges:** Review and evaluate academic standards for the College of Pharmacy. Bring recommended standard changes to the faculty for approval. Review student cases of academic failure or deficiency, and/or academic dishonesty/discipline. Develop and make progression recommendations to the administrator in charge of academic affairs.

## **10. Promotion/ Merit (approved changes 8/24/09)**

- A. Each committee member can serve a maximum of three years in a row before cycling off.
- B. Members: 3-Pharmaceutical Sciences, 3-Pharmacy Practice- Faculty members must be tenured at FSU.

**Charge:** To review portfolios and rank qualified individuals for promotion or merit increases in accordance with the FSU COP promotion policy and the FSU/Faculty Bargaining Agreement.

## **11. Strategic Planning**

- A. Term length and limit: 3 years, alternating
- B. Members: 3-Pharmaceutical Sciences, 3-Pharmacy Practice, 1-Administrator
- C. Terms will be staggered so as to replace one new person from each Department yearly.

**Charges:** Serve as a liaison to, and recommend new members for the Advisory Board. With input from the Advisory Board, implement a long-term unit action plan for the College of Pharmacy. Monitor the process and progress of this plan.

***Procedural committees of the College of Pharmacy are:***

**Sabbatical Review**

- A. There is no term limit for this committee.
- B. Members: 2 tenured members from each department

**Charges:** Evaluate and rank applications for sabbatical each year. The Chairperson for this committee will serve on the University Sabbatical Committee.

**Faculty Search: The appropriate department, when a faculty vacancy occurs, will organize its search committee as follows:**

- A. Term: The length of time necessary to replace the vacant position.
- B. Members: The College of Pharmacy Department that has the vacant position will determine the composition of the committee. The Chairperson for this committee will be appointed from the vacant position's seniority group.

**Charge:** Be involved in all aspects of recruitment (i.e. advertisement, interviewing, evaluation and prioritization of all qualified applicants).

**Tenure**

The procedure for attaining tenure will be administered by the tenured faculty of each department as defined by the current FFA-FSU contract and each department's tenure policy.

**Safety**

- A. No term limits for this committee
- B. Members: 1 faculty member from each of the three campuses (Big Rapids, Grand Rapids, Kalamazoo)

**Charge:** Identify and report safety and general building maintenance/environmental concerns to the appropriate campus authority.

***C. Ad Hoc Committees***

Ad hoc committees may be formed as needed. The Dean, in consultation with the committee, will review the status of these committees at the beginning of the academic year.

## II. Committee Membership

### A. Membership

1. All persons holding contractual faculty appointment with FSU in the College of Pharmacy at the rank of Instructor or above shall be voting members of the College of Pharmacy. Membership on a committee carries with it the right to vote on committee business, except as otherwise noted.
2. The seniority groups as defined in the FFA-FSU contract are:
  - a. Pharmacy/Pharmacy Administration
  - b. Pharmacy Practice
  - c. Pharmaceutical Chemistry
  - d. Pharmacology
3. The faculty of the Department of Pharmaceutical Sciences is defined as members of the following seniority groups:
  - a. Pharmaceutical Chemistry
  - b. Pharmacy/Pharmacy Administration
  - c. Pharmacology
4. The faculty of the Department of Pharmacy Practice is defined as members of the Pharmacy Practice seniority group.

Term limits, where applicable, are defined as a maximum number of consecutive years that may be served by one person.

***B. Additional standing or procedural committees may be formed as the need occurs by a majority vote of the faculty and consent of the Dean.***

***C. Ex-officio, members of any committee, except the Promotion/Merit, Sabbatical and Tenure committees may be appointed by the Dean or by the committee chairperson.***

***D. The term of membership for an official committee member, unless noted elsewhere, shall be one year commencing from the annual Fall Faculty Week College of Pharmacy Faculty meeting.***

***E. The appointment of ex-officio and/or non-faculty members shall be up for renewal at the start of each academic year.***

***F. Official committee members shall be selected by the faculty of the Departments/seniority groups to represent their respective Departments/seniority groups. An exception to this rule is on the Promotion/ Merit Committee where the Dean can appoint up to 50% of the committee. The Dean shall appoint administrative representatives unless otherwise specified by position title/responsibilities.***

### **G. Committee Chairperson**

1. Unless otherwise noted, the chairperson of each of the aforementioned committees will be elected annually by majority vote of the official committee membership at the first meeting of the academic year.
2. Each committee chairperson will be responsible for seeing that:
  - a. The committee carries out its appointed duties.
  - b. Minutes are taken at each committee meeting and kept as a permanent record of committee activities in the Dean's office.
  - c. A report of the committee's activities and meeting times is given to the faculty at each faculty meeting.
  - d. Committee business is conducted according to Robert's Rules of Order, Newly Revised.
  - e. A written report is generated at the end of the academic year detailing the activity of the committee and submitted to the Dean's Secretary by August 15<sup>th</sup>.

**The selection and function of all committees, whether permanent or ad hoc will abide by the current FFA-MEA-NEA/FSU master agreement.**

### **IV. Amendment of Policy Statement**

The policy statement governing all faculty committees at the College of Pharmacy may only be amended by a majority vote of the tenure track faculty and the concurrence of the administration.

### **V. Quorum**

A quorum for each of the aforementioned committees shall consist of one member over 50% of the committees' voting membership.

## Committee Membership

Committee	Term Limits	# Pharmaceutical Sciences Faculty	# Pharmacy Practice Faculty	# Administrators	#Adjunct Faculty	# Students
Accreditation	8 years <sup>A, I</sup>	2	2	2		2 <sup>B</sup>
Admissions	3 years <sup>A</sup>	2	2	1	N/A	2 <sup>B</sup>
Assessment	3 years <sup>A</sup>	3	3	2		
Awards	None	Dependent <sup>C</sup>	Dependent <sup>C</sup>	N/A	N/A	N/A
Continuing Ed	3 years <sup>A</sup>	2	2	1 <sup>D</sup>	1	N/A
Curriculum	3 years <sup>A</sup>	3	3	1	1	2 <sup>B, E</sup>
Faculty Search	None	See text	See text	See text	N/A	N/A
Professional Developmt	None	2	2	1	1 <sup>J, E</sup>	
Progressions	3 years <sup>A</sup>	3	3	2 <sup>F</sup>		
Promotion/ Merit	3 years	3 <sup>G</sup>	3 <sup>G</sup>	N/A	N/A	N/A
Sabbatical Review	None	2 <sup>G</sup>	2 <sup>G</sup>	N/A	N/A	N/A
Safety	None	1	2 <sup>H</sup>	N/A	N/A	N/A
Strategic Planning	3 years <sup>A</sup>	3	3	1	N/A	N/A
Tenure	N/A	N/A	N/A	N/A	N/A	N/A

### Key

- A. Except for Administrators
- B. 1-P1 or P2 student and 1-P3 or P4 student
- C. The P2 and P4 Class Advisors will serve on this committee
- D. Administrator or Director of Continuing Education
- E. Non-voting members
- F. The Administrator will be the administrator in charge of Academic Affairs. The assistant to this position will also serve as a non-voting member of this committee.
- G. Must be tenured members of the faculty and must cycle off for a minimum of one year if they have served three years in a row
- H. One faculty member from each Campus (one from Grand Rapids and one from Kalamazoo)
- I. One faculty member is replaced per year, alternating between Basic Sciences and Pharmacy Practice, students are replaced as they graduate with a new P1 student.
- J. One person from the Faculty Center for Teaching and Learning (not adjunct faculty)

N/A Non- applicable



## Appendix 5.3

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### COP Committee Assignments for 2009-2010

#### Committees at Large:

Accreditation.....	Durst, Hult, Krueger, Saadeh, Smith
Admissions.....	Wellman, Durst, Hancock, Morse, Potter, Van Loo
Assessment Committee.....	Wellman, Durst, DeHoag, Feucht, Dakkuri, Hancock, Potter, Mersfelder
Awards.....	Class Advisors
Continuing Education.....	Bates, Coveyou, Krueger, Thill
Curriculum.....	Smith, Boncher, Coveyou, Dakkuri, Hult, Lovsted, Straley
Curricular Revision (ad hoc).....	DeHoag, Lovsted, Potter, Ross, Smith, Wellman, Dianne Miller
Professional Development Committee.....	Saadeh, Bernknopf, Boncher, Ngoh, Seiferlein
Diversity Committee.....	Boncher, Jameson, Bailey, Lyons, Nogh, Raguckas
Progressions Committee.....	Smith, Dakkuri, Hancock, Jameson, VandenBussche
Rank & Promotion.....	Dakkuri, DeHoag, Krueger, Potter, Ross, VandenBussche
Sabbatical Committee.....	Koski, McMullen, Ngoh, Thill
Safety.....	Boncher, deVoest, Krueger, Rowley
Strategic Planning.....	Bates, Bouthillier, Klepser, Krueger, Lee, McMullen
White Coat Ceremony Committee.....	P-2 Class Advisors
Seminar Coordination.....	Smith, Lee, Bailey
PEDALS.....	Koski, Bouthillier, Schulz, Hanson

#### Misc.

AACP Delegate/Alternate.....	John Jameson, Kali Schulz
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#### University-Wide Committees

Academic Policy & Standards Committee.....	Elsie Lovsted
Academic Program Review.....	Gregg Potter
Academic Senate.....	Elsie Lovsted, Tracey Boncher, Adnan Dakkuri
Academic Senate Diversity Committee.....	Teresa Bailey
Arts & Lectures Committee.....	
Athletic Advisory Committee.....	Kim Hancock
Distinguished Teacher Award Committee.....	Adnan Dakkuri
Faculty Research Committee.....	Dave Bennett
Health Promotion & Substance Abuse Prevention Committee .....	Robert Krueger
Library/Historical/ Archival Committee.....	
Professional Development Committee.....	Adnan Dakkuri
University Curriculum Committee.....	Tracey Boncher
University Graduate & Professional Council.....	Renee Koski
International Education Committee.....	

## Appendix 9.1

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### Ability Based Outcomes Ferris State University College of Pharmacy 2007

#### I. Patient-Specific and Population-based Disease Management

*Provide patient-specific and population-based disease management in cooperation with patients, prescribers, and other members of an interprofessional health care team based upon sound therapeutic principles and evidence-based data, taking into account relevant legal, ethical, social, economic, cultural, political and professional issues, emerging technologies, and evolving pharmaceutical, biomedical, sociobehavioral, and clinical sciences that may impact therapeutic outcomes.*

Level 1: Gather, organize and evaluate information in order to provide patient-specific and population-based disease management.

- a. Identify the concept, components, behaviors and values associated with patient-specific and population-based disease management (including determinants of illness, factors influencing the use of health services).
- b. Gather relevant information / collect data (via observation, interview, computer and other data bases) needed to provide patient-specific and population-based disease management.
- c. Describe the biological sciences (physiology, pathophysiology, biochemistry, microbiology, immunology, etc.) associated with the patient-specific and/or population-based disease management plan.
- d. Describe the pharmacology, medicinal chemistry, pharmaceuticals, and pharmacokinetics of prescription, non-prescription and dietary supplements used in the patient-specific and/or population-based disease management plan.
- e. Describe pathophysiologic and pharmacotherapy alterations specific for special population patients (e.g., pediatric, geriatric, pregnant, cystic fibrosis, sickle cell anemia, celiac disease, genetic disorders, and others).
- f. Explain the components of physical assessment.
- g. Explain the use of devices and other means for detecting and/or monitoring diseases.
- h. Describe the routes of administration and the appropriate drug delivery dosage form for the management of a specific patient (e.g., pediatric, geriatric) or therapeutic problem.
- i. Assess pharmacoeconomic data to select the dosage form, amount, and manufacturer of a drug product.
- j. Describe the dispensing process as it relates to different medication use systems
- k. Describe the various medication administration techniques.
- l. Identify the categories of drug-related problems and medical errors.
- m. Describe the value of documenting patient-specific and/or population-based disease management activities.
- n. Identify the common drug and disease oriented pharmacy references and distinguish between primary, secondary, and tertiary literature.
- o. Identify appropriate online information resources.
- p. Describe the nature, classification, and specific aspects of a drug information request.
- q. Retrieve professional, lay and scientific literature and identify appropriate media to 1) communicate drug information effectively to patients, their families, and other involved health care providers and 2) make evidence-based therapeutic decisions.
- r. Retrieve information useful in making dispensing and compounding decisions.
- s. Describe the relevant cultural and societal influences on patient-specific and population-based disease management with emphasis on the appropriate or inappropriate use of drug therapy.
- t. List or describe different milestones in the history of pharmacy.
- u. Describe the rationale for the shift in practice from product to patient-centered care.

Level 2: Analyze patient information in order to provide patient-specific and population-based disease management.

- a. Establish goals and desired outcomes for the patient-specific and/or population-based disease management plan.

- b. Interpret and prioritize data/evidence needed to formulate and implement a patient-specific and/or population-based disease management plan to achieve desired outcomes.
- c. Relate the biological sciences (physiology, pathophysiology, biochemistry, etc.) to a patient-specific and/or population-based disease management plan.
- d. Relate the pharmaceutical sciences (medicinal chemistry, pharmacology, pharmaceuticals) to a patient-specific and/or population-based disease management plan.
- e. Relate alterations specific for special population patients to dosage calculation and adjustments, and drug monitoring in special-population patients.
- f. Compound, prepare, and dispense prescription products accurately and safely.
- g. Perform basic physical assessment.
- h. Analyze information from devices and other means for detecting and/or monitoring diseases.
- i. Select the most appropriate drug delivery dosage form/device for the patient based on pharmacotherapy, age, disease, bioequivalence, route of administration, stability, incompatibility, and cost.
- j. Calculate equivalent dosages for drug products which vary according to their manufacturer, delivery system, route of administration and/or salt form.
- k. Calculate dosage regimens using pharmacokinetic principles.
- l. Develop a monitoring plan that evaluates achievement of pharmacotherapeutic goals.
- m. Identify drug-related problems and medical errors.
- n. Articulate patient-related and system-related factors contributing to adherence.
- o. Explain methods of documenting patient-specific and/or population-based disease management activities.
- p. Determine the appropriate information to evaluate to respond to drug information requests.
- q. Exhibit the ability to utilize appropriate online information resources.
- r. Analyze professional, lay and scientific literature and identify appropriate media to 1) communicate drug information effectively to patients, their families, and other involved health care providers and 2) make evidence-based therapeutic decisions.
- s. Discuss the application of study results to expanded patient populations.
- t. Explain how differences in approach to social, cultural, linguistic, political and scientific issues among people can affect behaviors related to disease management and health policy.
- u. Apply knowledge of the historical underpinnings of pharmacy to principles of interprofessional practice.

Level 3: Implement, monitor, evaluate, adjust, document and communicate the patient-specific and/or population-based disease management plan.

- a. Apply pharmaceutical sciences, pathophysiology, and pharmacotherapy to individual patients.
- b. Integrate the elements of physical assessment into the patient-specific and/or population-based disease management plan.
- c. Apply pharmacokinetic principles to patient-specific situations.
- d. Evaluate alterations specific for special population patients when implementing the patient-specific and/or population-based disease management plan.
- e. Evaluate and apply information from devices and other means for detecting and/or monitoring diseases when implementing and monitoring the patient-specific and/or population-based disease management plan.
- f. Implement the patient-specific and/or population-based disease management plan (including monitoring for achievement of pharmacotherapeutic goals).
- g. Effectively collaborate with and communicate the patient-specific and/or population-based disease management plan to prescribers, patients, care givers, and other involved health care providers to engender a team approach to patient care.
- h. Assume responsibility for drug-related patient outcomes.
- i. Compound, prepare, and dispense prescription products with consideration of patient specific parameters and medication safety.
- j. Administer medications by appropriate routes.
- k. Predict and prevent drug-related problems and medical errors.
- l. Use various methods to enhance patient adherence.
- m. Evaluate and interpret professional, lay and scientific literature and identify appropriate media to 1) communicate drug information effectively to patients, their families, and other involved health care providers and 2) make evidence-based therapeutic decisions.
- n. Assess the utility and accuracy of a response to a drug information request and the impact of the response on patient-specific and/or population-based disease management.

- o. Provide inservice education with the appropriate content to physicians, nurses, and other health care professionals.
- p. Provide pharmacologic and non-pharmacologic education with the appropriate content to patients or care givers.
- q. Maintain professional competence by identifying and analyzing emerging issues, products, and services that may impact patient-specific/population-based therapeutic outcomes.
- r. Contribute opinions, insights, information and leadership assertively and appropriately during the health care team decision-making process.

## II. Health Promotion

*Promote health improvement, wellness, and disease prevention in cooperation with patients, communities, at-risk populations, and other members of an interprofessional team of health care providers. Provide first aid and pharmacy services in disaster and poison control situations.*

Level 1: Describe the basic elements of emergency care and health promotion.

- a. Describe emergency situations requiring medical care and the role of pharmacists in these situations, including: first aid, disasters and poison control
- b. Describe the use of drugs in disaster planning
- c. Identify various therapeutic alternatives, both pharmacologic and non-pharmacologic, which can be used to treat emergency situations.
- d. Identify the basic concepts of health promotion (including determinants of health, factors contributing to health promotion, factors influencing the use of health services).
- e. Explain the use of devices and other means for providing health promotion services.
- f. Describe social, professional, ethical and legal issues involved in the delivery emergency care and health promotion.
- g. Identify sources of information and explain the information provided by public health agencies (e.g. epidemiology, economics, substance abuse, genetic screening, policies and guidelines, etc.).
- h. Describe the signs and symptoms of substance abuse.

Level 2: Provide emergency care and develop health promotion services.

- a. Obtain first aid and basic life support (BLS) certification.
- b. Demonstrate the ability to provide emergency care (i.e. first aid, BLS, ACLS, poison control interventions).
- c. Obtain immunization certification.
- d. Design a prevention or detection program in a target population.
- e. Recognize problems, based on signs, symptoms, and pertinent history, that require referral to another health care provider.
- f. Evaluate the results of primary literature studies within the context of an individual or population related to emergency care or health promotion.

Level 3: Provide health promotion services in accordance with social, professional, ethical, and legal guidelines.

- a. Critique a disaster preparedness plan for both natural and man-made disasters
- b. Teach the basic concepts of disease prevention, including ethical, legal and social issues, to the general public and other health care professionals
- c. Conduct or provide programs designed to provide public education and/or promote public awareness of disease prevention and health collaboratively with others.
- d. Perform services designed to screen, prevent, and/or detect various disease or pathologic conditions collaboratively with others.
- e. Provide appropriate and professional referral for potential or actual substance abuse in patients and colleagues.
- f. Provide appropriate triage of patient problems, based on signs, symptoms and a patient history that require referral to another health care provider.

### III. Systems Management

*Manage and use resources of the health care system, in cooperation with patients, prescribers, other health care providers, and administrative and supportive personnel, to promote health; to provide, assess, and coordinate safe, accurate, and time-sensitive medication distribution; and to improve therapeutic outcomes of medication use. This includes: managing human, physical, medical, informational, and technological resources; apply patient- and population-specific data, quality assurance strategies, and research processes to assure that medication use systems minimize drug errors, adverse reactions and optimize patient outcomes. This also includes designing medication use systems in accordance with legal, ethical, social, economic, and professional guidelines.*

Level 1: Specify elements necessary for purchasing, preparing, dispensing, distributing and administering medications and maintaining adequate inventory control. State the components necessary to manage DIFFERENT TYPES OF pharmacy operations with consideration of management principles, law and ethics. Identify elements of and describe the importance of adverse drug reaction (ADR)/medication errors reporting, drug use evaluation (DUE), and a formulary system.

- a. Describe the important laws enacted at the federal and state level that influence the use of prescription and non-prescription drugs and dietary supplements in the U.S.
- b. Describe the storage, packaging and quality control tests performed to assure that the dosage form meets USP requirements.
- c. Describe the basic structure and function of the U.S. health care system, and currently available medication distribution systems.
- d. Describe the role of indigent care prescription drug programs in the delivery of medications for those in need, without prescription benefit insurance or adequate financial means.
- e. State relevant metrics that assist the pharmacy manager in identifying the success of their business plan, operational budget, prescription benefit plan contracts and delivery of services.
- f. Describe the fundamental methods used to develop HRQOL instruments and establish their reliability and validity.
- g. Define informatics and its role in the delivery of pharmacy services and health care, now and in the future.
- h. Describe different marketing principles that apply to pharmacy operations.
- i. Describe the important principles of time and project management.
- j. Describe the fundamentals of jurisprudence related to the U.S. legal system.
- k. Outline the difference between administrative, civil and criminal law for the relevant state.
- l. Describe the principles of business contract law.
- m. List some of the historical events that have shaped the practice of pharmacy in the U.S.
- n. Discuss the rationale (both historical and contemporary) for the shift in pharmacy practice from product focus to patient care focus.
- o. Describe the different roles and responsibilities of professional and technical personnel in different type of pharmacy operations and clinical micro-systems.
- p. Define the major management principles applicable to the operations of a pharmacy practice including logistics (supply chain management), human resource and financial management.
- q. Identify the key components of a drug utilization evaluation.
- r. Identify the basic concepts of risk management and their relationship to drug distribution systems.

Level 2: Identify and analyze characteristics associated with purchasing, preparing, dispensing, distributing and administering medications and maintaining adequate inventory control. Demonstrate advanced skills in managing pharmacy operations, human resources, logistics fiscal management, law and ethics. Develop systems for the reporting of medication errors and ADR's, for the conduct of DUE, and for the maintenance of a formulary system.

- a. Interpret basic federal and state rules and regulations that influence pharmacy practice (administrative, criminal, civil) related to prescription and nonprescription drugs.
- b. Select and prepare drug products based on USP standards, bioequivalence and therapeutic equivalence studies; and state the relevant storage requirements.
- c. List the advantages and disadvantages of relevant health care and drug distribution system for the management of a specific patient (e.g., pediatric, geriatric) or therapeutic problem.
- d. Describe the role and function of prescription benefit plans including relevant federal (e.g. Medicare, Medicaid) and state plans.

- e. List the patient-specific parameters that would be important in determining eligibility and need for indigent patient care programs.
- f. Describe the role of a formulary and the different pharmacoeconomics tools used in formulary and prescription benefit management.
- g. Search and find an appropriate HRQOL instrument for use in evaluating the impact of a therapeutic intervention.
- h. Identify the organization and setting specific parameters that dictate decisions on the application of principles of human resource, financial and logistics management.
- i. List different informatics tools that are relevant to the delivery of patient centered pharmacy services, product distribution and relevant health care services.
- j. List the obstacles to outcomes-based continuity of care for patients that are relevant to pharmacy practice.
- k. Describe different marketing principles as they would apply to contemporary pharmacy operations.
- l. Evaluate the strategies used to effectively manage a project related to a pharmacy operation.
- m. List the site and patient specific characteristics that dictate the role of the pharmacist in health delivery systems as well as clinical micro-systems.
- n. Interpret principles of jurisprudence in the context of exposure to pharmacy practice settings in the experiential.
- o. Identify the medication use system specific characteristics that are susceptible to flaws in prescribing, dispensing and use.
- p. Describe relevant civil and criminal law that influences practice and malpractice in pharmacy.
- q. Identify the relevant contract law that influences the different aspects of managing a pharmacy.
- r. List the important milestones that have contributed to the evolution of pharmacy practice in the U.S.
- s. List the site specific characteristics that influence managerial decisions related to the operations of a pharmacy practice including logistics (supply chain management), human resource and financial management.
- t. List the important characteristics, which must be considered when evaluating, selecting and implementing automated technology.
- u. Describe the role of root cause analysis and other risk management techniques as they relate to medication errors and ADR's; and design a basic drug utilization evaluation.
- v. List the operation-specific parameters that determine the safety of medication distribution and practice services.

Level 3: Apply information regarding purchasing, preparing, dispensing, distributing and administering medications and purchasing other supplies to optimize pharmaceutical care. Apply management principles to effectively manage a pharmacy operation, including resources, facilities, and equipment. Actively participate in the management of medication use through the reporting of medication errors and ADR, conducting and presenting DUE, and preparing and delivering formulary recommendations.

- a. Make recommendations on the appropriate preparation, storage and quality control (including the relevant USP standards) for any preparation made in a pharmacy.
- b. Assist patients in interpretation and use of federal, state and private prescription insurance programs.
- c. Identify the specific programs that a patient would access for indigent care programs given the necessary patient-specific parameters.
- d. Apply the appropriate pharmacoeconomic tool to the situation, as relevant to formulary and prescription benefit administration.
- e. Interpret HRQOL information from the primary literature in pharmacy and medicine.
- f. Recommend managerial interventions to address issues in human resource, financial and logistics management with consideration of the unique characteristics of the practice setting.
- g. Recommend relevant informatics tools that are relevant to the delivery of patient centered pharmacy services, product distribution and relevant health care services.
- h. Using marketing principles, develop and a plan for any contemporary pharmacy operation or service with consideration of segments of the market including payers, patients and other providers.
- i. Plan a simple project related to a pharmacy operational change or implementation.
- j. Comply with relevant administrative, civil and criminal law related to the practice of pharmacy and be prepared to successfully complete the State of Michigan law exam.
- k. Identify the role of negligence law in professional malpractice; and interpret all relevant Michigan case law that is relevant to shaping the common law duties of a pharmacist.
- l. Employ fundamental contract law principles in managing different aspects of a pharmacy operation.

- m. Critique and conceptualize basic pharmacy services that rely more heavily on the patient care versus product specific aspects of service; provide greater continuity of pharmacy care; and consider the implications of unique patient populations (e.g. pediatrics, geriatrics, hospice, etc.)
- n. Critique contemporary pharmacy distribution systems for improvements in design related to the safety and efficiency of prescription dispensing, and optimal utilization of human resources (professional and technical), including the use of automated technologies.
- o. Critique contemporary pharmacy service delivery systems for the appropriate use of logistics (supply chain management).
- p. Using risk management principles, develop a plan to minimize medication errors for a particular practice setting.
- q. Conduct and evaluate the results of a drug utilization evaluation.

#### **IV. Communication**

*The student shall read, write, speak, listen and use data, media and computers to communicate effectively with various audiences for a variety of purposes.*

Level 1: Demonstrate basic communication skills and assess the quality of communication performance in situations involving reading, listening, writing, speaking, and use of data, media, and computers. Write and speak accurately and clearly during communications with patients, health professionals, peers and teachers.

- a. Use data, media, and computers to assist in communications with patients, health professionals, peers and teachers.
- b. Interpret ideas, thoughts, and feelings communicated through reading.
- c. Identify personal strengths, weaknesses, barriers, and preferences in all modes of communication.
- d. Identify the basic components of conflict resolution.
- e. Exhibit a caring and respectful attitude and demonstrate empathy while establishing rapport and communicating with the patients and/or caregiver.
- f. Describe methods to relate the information to other health care professionals and patients/caregivers, including the appropriate media.
- g. Demonstrate sensitivity and tolerance within multicultural interactions and settings.
- h. Document patient management activity in a patient profile or medical record to facilitate communication and collaboration among healthcare providers.

Level 2: Demonstrate improvement in basic communication skills and exhibit creativity in communication situations through the use of reading, listening, writing, speaking, and use of data, media, and computers.

- a. Use writing, speaking, data, and media creatively to convey convincing messages, both individually and in groups.
- b. Use computer technology creatively to convey information and proposals in narrative, graphic, and tabular modes.
- c. Given a specific situation describe the best mechanism for conflict resolution.
- d. Establish collaborative relationships with other healthcare professionals that foster a team approach to patient care.
- e. Effectively communicate drug and health information at appropriate levels for patients and healthcare professionals.
- f. Use active listening techniques during any verbal exchange of information.

Level 3: Communicate clearly, accurately, compassionately, confidently, effectively and persuasively using a variety of methods (i.e. reading, listening, writing, speaking, and the use of data, media, and computer skills) and with a variety of target audiences.

- a. Choose communication methods appropriate to the purpose of the interaction.
- b. Choose communication methods that are sensitive to the cultural background of the target audience.
- c. Write, read, listen, speak and use data, media, and computers during communications effectively in a variety of contexts.
- d. Interpret ideas, thoughts and feelings communicated through reading, listening, data, media, and computers with sensitivity to the cultural background of the sender.
- e. Use conflict resolution when managing human resources.

- f. Adapt communication methods to the situation and appropriate member of the health care team to engender a team approach to patient care.
- g. Construct messages appropriate to the target audience to deliver information clearly and in a manner in which the message is heard.
- h. Assess the target audience to ensure the correct message was received.
- i. Use appropriate communication skills to assure efficient, cost-effective utilization of human, physical, medical, informational, and technological resources in the provision of patient care.
- j. Choose appropriate communication methods to identify and resolve medication use problems.
- k. Communicates and collaborates with health care providers, policy makers, members of the community and administrative and support personnel to identify and resolve public health problems.
- l. Respond appropriately, and in the correct format (written or verbal) to questions posed.
- m. Apply effective communication skills in inter-professional relationships to improve the clinical, economic, and humanistic outcomes of patients.
- n. Educate and/or counsel patients, caregivers or other health care providers about the proper use of medical goods and devices to ensure effective use.
- o. Educate and/or counsel patients, caregivers or other health care providers about drug therapy.
- p. Provide appropriate evaluation and feedback to peers/educators and other health care providers.
- q. Use appropriate persuasion techniques when providing recommendations to patients, educators, peers and other health care providers.
- r. Assess health literacy and counsel/teach in an appropriate format based on the assessment.

## V. Problem Solving

*The student shall find and analyze information and shall make informed, rational, and ethical decisions.*

Level 1: Describe critical-thinking processes and the scientific method and apply them in developing solutions to simple problems.

- a. Systematically gather and record relevant information (e.g., read, listen, observe, recall and reflect).
- b. Identify assumptions, biases, and prejudices relevant to the issue

Level 2: Identify and analyze ideas and problems of increasing complexity, generate defensible solutions, and establish criteria for evaluation of solutions.

- a. Use the results of statistical analyses, probability studies application, and advanced electronic information searching and processing to analyze information.
- b. Develop interdisciplinary approaches to problem analysis.
- c. Identify realistic outcomes. Construct criteria for evaluation of chosen solutions.
- d. Identify and analyze core scientific and systems-based knowledge as part of the problem solving process.
- e. Analyze information by summarizing, identifying principles of organization; by identifying the relationships between premises and conclusions; by distinguishing facts, inferences, theories, and opinions; and by identifying assumptions.
- f. Assess accuracy, fairness, significance, relevance, completeness, and persuasiveness of information and its sources.
- g. Evaluate the conclusion according to identified criteria.

Level 3: Make decisions regarding complex problems that require an integration of one's ideas and values within a context of scientific, social, cultural, and ethical issues.

- a. Frame problems and solutions within appropriate social, scientific, cultural, intellectual, and ethical contexts.
- b. Articulate specific criteria for determining success or failure of solutions.
- c. Display openness to new ideas and a tolerance for ambiguity and incompleteness.
- d. Identify approaches to modify solution implementation.
- e. Modify solutions when monitoring indicates a need.
- f. Prioritize problems based on identifiable criteria or standards.
- g. Evaluate literature to formulate evidence based recommendations.
- h. Synthesize information and create a solution, hypothesize, draw conclusions, conjecture alternatives, or decide a course of action.
- i. Provide support for arguments, solutions and results.



- j. Use appropriate technology to analyze information.

## VI. Professionalism

*The student shall articulate the influence of values on ideas and actions and shall demonstrate the ability and inclination to take responsibility for ethical conduct in personal and professional settings. The student shall demonstrate the ability and inclination to learn on one's own, to pursue new knowledge, to self-assess, to respond appropriately to assessment by others, and to modify one's ideas in light of new discoveries.*

Level 1: Recognize the role of values in personal and professional interactions. Maximize learning through the use of effective personal learning strategies.

- a. Identify which values influence one's own behavior in social and professional settings.
- b. Identify which values influence the behavior of other individuals and groups in social and professional settings.
- c. Describe the process by which values influence behavior in social and professional settings.
- d. Describe how values inform and are conveyed by artistic works and sociocultural activities.
- e. Display an appreciation / respect for the legal system.
- f. Articulate a personal approach to learning, including time management strategies, optimal locations for study, and utilization of available instructional resources.
- g. Identify strengths and weaknesses within one's personal approach to learning.
- h. Explain the necessity of lifelong learning to maintain professional competence and personal growth.
- i. List different ethical principles that guide ethical decision-making in pharmacy and medicine.
- j. Describe the values that are integral to patient-centered care and the profession (e.g., honesty, justice, empathy, altruism, compassion, autonomy).
- k. Describe the important characteristics of leadership and their importance in health care innovation, pharmacy management and pharmacy systems design.

Level 2: Evaluate personal and professional conduct according to ethical theories and principles. Improve personal performance through assessments by self and others.

- a. Articulate the reasons that one's profession has adopted specific values.
- b. Display professionalism in the classroom.
- c. Interpret assessment feedback to identify own areas of strengths and areas needing refinement or remediation.
- d. Self assess the effectiveness of learning performance.
- e. Formulate strategies to address performance areas, including one's approach to learning, in need of refinement or remediation.
- f. Initiate action to correct identified errors or learning difficulties without prompting.
- g. Use key ethical principles in the resolution of ethical dilemmas (e.g. autonomy, beneficence, non-maleficence, justice, honesty).
- h. Evaluate the role of leadership and leadership styles on health care innovation, pharmacy management and pharmacy systems design.

Level 3: Adopt or construct ethical principles and use them as a guide for one's actions. Complete learning activities on an ongoing basis for personal and professional development based upon self-determined areas of deficiency and/or interest.

- a. Display professionalism in pharmacy practice.
- b. Regularly self-assess learning needs for ongoing personal and professional growth.
- c. Engage in activities on a regular ongoing basis for professional development.
- d. Employ the principles that are integral to patient-centered care and the profession (e.g., honesty, justice, empathy, altruism, compassion, autonomy).
- e. Employ ethical principles and a systematic decision making process to resolve ethical dilemmas within complex personal, societal, and professional situations.

## Appendix 10.1

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### Curriculum Committee Policies and Procedures

FERRIS STATE UNIVERSITY  
COLLEGE OF PHARMACY  
CURRICULUM COMMITTEE

#### Course Addition, Modification and Deletion Procedures

**I. Purpose:** The purpose of this procedure is to outline for the Curriculum Committee and College of Pharmacy (COP) faculty, the procedures and forms necessary to request course additions, modifications and deletions. This is to insure that substantial changes in course work do not alter the curriculum in a manner inconsistent with the intent of the faculty of the College of Pharmacy

**II. Form Definitions:** Forms can be downloaded at the [University Curriculum Committee](#) site.

Form A – Proposal Summary and Routing Form

Form C – Library and Instructional Services Consultation Form

Form E – New Course Information Form

Form F – Create a New Course; Modify an Existing Course; Delete a Course

Form B – Consultation Form for Graduate Professional Council

**III. Procedures for minor course changes requiring action by the College of Pharmacy Curriculum Committee (CPCC).** The purpose of this section is to provide the most current course outline to the CPCC for the purposes of conducting up-to-date course content evaluations. This includes changes in a course outline for an approved course in the Pharm.D. curriculum such as:

1. Adding a topic;
2. Deleting a topic; and
3. Changing the allocation of subject hours for a given topic.

Course changes that fall under this category should be submitted to the Curriculum Committee using the Form E. Approval for changes such as this are limited to the CPCC. Course faculty should review Section IV of this procedure to determine if changes made could be defined as substantial enough to be classified as a change in the official course description. Under these circumstances, the CPCC will consider these changes under the procedures outlined in Section IV.

#### **IV. Procedures for course additions, deletions, or substantial changes.**

Course changes that fall under this section include:

1. The addition of a new course (required or elective) to the pharmacy curriculum;
2. The deletion of an existing course in the pharmacy curriculum;
3. Any modification of course title, credit hours, course description, grading method (e.g. letter grade to pass/fail) or pre-requisites; or
4. A content change for an existing course which is substantial enough to be considered, in the judgment of the CPCC, a change in the official course description.

Faculty members who wish to make a course addition, deletion or modification (as defined in this section) must submit to the CPCC a course proposal as well as the requisite University Curriculum Committee (UCC) forms as outlined in Table 1. Forms should be submitted in hard copy with electronic versions available upon request. All forms should be submitted to the Chair of the CPCC. The Chair of the CPCC will forward the forms to the appropriate Committee/Departments for review and approval.

**Table 1: Requisite University Curriculum Committee Forms**

	<b>Form A</b>	<b>Form C</b>	<b>Form E</b>	<b>Form F</b>	<b>Form B</b>
Add New Class <sup>a</sup>	X	X	X	X	X
Modify Existing Class	X	X	X	X	X
Delete Class	X	X		X	X

<sup>a</sup> Includes experimental course as defined in this document.

**Course Proposal for new courses:** Any proposals for new courses must include the forms outlined above and a new course proposal. The new course proposal should include:

1. Course title
2. Name(s) of originator
3. Course pre-requisites/co-requisites
4. Identification of the course's relationship to required courses.
5. Recommended sequencing
6. Proposed textbook
7. Number of credit hours
8. Content delivery format (lab/lecture)
9. Projected class size
10. Course goals
11. Course objectives
12. Method of evaluation

**Approval and timetable:** Changes which fall under Section IV (1-4) must be approved by the CPCC, both departments of the College of Pharmacy and the UCC. Other minor changes in content require only an approval by the CPCC. In order for to approve a curricular change/addition two thirds of the faculty, of each department, must vote in favor of the change/addition. Votes must be tallied and reasons for concerns reported to the UCC. If either department votes in disagreement with the CPCC, the recommendation will be voted on by the full faculty at the next COP faculty meeting. At the discretion of the Chair of the CPCC, an e-mail vote may be conducted to expedite moving the proposal to the UCC. In these cases, a quorum of votes must be received and reported at the next full faculty meeting. Faculty who wish to make any of these changes should recognize the following time-table to accommodate this approval process. Items that may be controversial may not be able to be approved within the normal time period.

1. For Summer or Fall Semester: To CPCC 12<sup>th</sup> week of the preceding Fall semester.
2. For Winter Semester: To CPCC by the 1<sup>st</sup> week of the preceding Fall semester.

**Experimental Course:** The CPCC recognizes that faculty may wish to develop course work and test pedagogy associated with it prior to submitting it as an official "New Class" addition to the curriculum. To accommodate this, faculty may make a new class available to students as an "Experimental New Course" for two offerings

before it is submitted formally to the COP faculty and UCC. Faculty who wish to develop and deliver an experimental course must submit a Course Proposal, as well as Forms A, E and F to the CPCC for approval prior to the registration period for the semester it is to be offered. Once approved by the CPCC, the Experimental New Course must be approved by the Dean of the College of Pharmacy and the Office of Academic Affairs.

**Independent Study Course:** If not already on the books, a new independent study course should be created consistent with the procedures for a new course.

**Curricular Modifications:** Changes in three different courses which require simultaneous action by the UCC may require an FSU Academic Senate approval as defined for a modification of the curriculum.

Approved: May, 2007

## Appendix 10.2

### Curriculum

Professional Year 1 – Fall Semester	Cr	Grade	Professional Year 3 – Fall Semester	Cr	Grade
PHAR 311: Medical Biochemistry	3		PHAR 540: Drug Lit Evaluation/Research Methods	3	
PHAR 334: Pharmacy and Health Care in the US	3		PHAR 511: Pharmacotherapeutics 1	4	
PHAR 315: Pathophysiologic Basis for Therapeutics 1	3		PHAR 512: Pharmacotherapeutics 2	3	
PHAR 318: Drug Delivery 1	3		PHAR 585: Practice Skills Lab 5	1	
PHAR 335: Clinical Communications	2		PHAR 535: Sociopharmacy and Professional Ethics	3	
PHAR 385: Practice Skills Lab 1	1		PHAR 591: Longitudinal Patient 2 IPPE	0.5	
PHAR 328: Pharmaceutical Calculations	1				
<b>Semester GPA</b>	<b>16</b>		<b>Semester GPA</b>	<b>14.5</b>	
Professional Year 1 – Spring Semester	Cr	Grade	Professional Year 3 – Spring Semester	Cr	Grade
PHAR 312: Molecular Biochemistry & Biotechnology	3		PHAR 525: Pharmacy Practice Management 2	3	
PHAR 340: Nonprescription Medicine and Self-Care	3		PHAR 530: Pharmacy Law	2	
PHAR 316: Pathophysiologic Basis for Therapeutics 2	3		PHAR 513: Pharmacotherapeutics 3	3	
PHAR 319: Drug Delivery 2	4		PHAR 514: Pharmacotherapeutics 4	3	
PHAR 386: Practice Skills Lab 2	1		PHAR 586: Practice Skills Lab 6	1	
English 321/421	3		PHAR 589: Integrated Case Studies	2	
			PHAR 591: Longitudinal Patient 2 IPPE	0.5	
<b>Semester GPA</b>	<b>17</b>		<b>Semester GPA</b>	<b>14.5</b>	
Professional Year 1 – Summer Semester	Cr	Grade	Electives: Must be completed prior to 4 <sup>th</sup> year.	Cr	Grade
PHAR 393: Community IPPE	2		Pharmacy Elective 1	2	
			Pharmacy Elective 2	2	
Professional Year 2 - Fall Semester	Cr	Grade	Professional Year 4	Cr	Grade
PHAR 428: Pharmacokinetics	3		PHAR 680: Clinical Seminar	0.5	
PHAR 421: Infectious Disease 1	3*		PHAR 680: Clinical Seminar	0.5	
PHAR 411: Drug Action 1	4		PHAR 600: Internal Medicine 1 APPE	4	
PHAR 412: Drug Action 2	4		PHAR 601: Internal Medicine 2 APPE	4	
PHAR 485: Practice Skills Lab 3	1		PHAR 602: Ambulatory Care 1 APPE	4	
PHAR 491: Longitudinal Patient 1 IPPE	0.5		PHAR 603: Ambulatory Care 2 APPE	4	
<b>Semester GPA</b>	<b>15.5</b>		PHAR 610: Institutional Practice APPE	4	
Professional Year 2 - Spring Semester	Cr	Grade	PHAR 611: Community Pharmacy APPE	4	
PHAR 413: Drug Action 3	4		APPE Elective – PHAR _____	4	
PHAR 414: Drug Action 4	4		APPE Elective – PHAR _____	4	
PHAR 486: Practice Skills Lab 4	1		APPE Elective – PHAR _____	4	
PHAR 422: Infectious Disease 2	3		<b>(37 Hours Total)</b> 1 <sup>st</sup> Semester GPA		
PHAR 425: Pharm Practice Mngment 1	3		Cumulative GPA		
PHAR 491: Longitudinal Patient 1 IPPE	0.5		2 <sup>nd</sup> Semester GPA		
<b>Semester GPA</b>	<b>15.5</b>		Cumulative GPA		
Professional Year 2 – Summer Semester	Cr	Grade	<b>Total Hours for Graduation</b>	<b>138</b>	
PHAR 493: Institutional IPPE	2				

**Began Program:** \_\_\_\_\_

**Graduation Date:** \_\_\_\_\_

**Honors Received:**

\*This course will be 4-credits until the microbiology pre-pharm changes take effect for students entering this sequence.

## Appendix 10.3

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### Electives Approved electives as of June 2010

#### **Electives:**

- PHAR 451: Institutional Pharmacy
- PHAR 453: Topics in Nutritional Biochemistry
- PHAR 454: Current Controversies in Health Care
- PHAR 455: Introduction to Public Health
- PHAR 457: Introduction to Pharmacy Law & Ethics
- PHAR 463: Botanical Supplements and Alternative Therapies
- PHAR 464: Natural Product Toxins
- PHAR 466: Research Elective in Medicinal Chemistry
- PHAR 468: Selected Topics in Medicinal Chemistry
- PHAR 470: Pharmacy and Geriatric Health
- PHAR 551: Managed Care Pharmacy Practice
- PHAR 552: Advanced Topics in Infectious Diseases
- PHAR 553: Palliative Care
- PHAR 554: Complementary and Alternative Medicine for the Clinical
- PHAR 556: Application of Patient-Focused Care in Community Pharmacy
- PHAR 558: Medical Research: Methods and Design
- PHAR 559: Interdisciplinary Community Practicum
- PHAR 560: Advance Cardiac Life Support
- PHAR 563: Special Populations: Pediatrics and Geriatrics

#### **Electives – Advance Pharmacy Practice Experiences:**

- PHAR 617: Hospital Pharmacy Admin APPE
- PHAR 618: Managed Care APPE
- PHAR 626: Veterinary Medicine APPE
- PHAR 628: Nuclear Pharmacy APPE
- PHAR 650: Special Topics in Inpatient Medicine APPE
- PHAR 655: Special Topics in Ambulatory Care APPE
- PHAR 666: International Pharmacy APPE
- PHAR 662: Pharmaceutical Industry APPE
- PHAR 661: Corporate Pharmacy APPE
- PHAR 663: Health System Pharmacy APPE

## Appendix 10.4

### Student Assessment of Instruction (SAI)

**Directions:**

1. In the Assessment part of the answer sheet, darken the cell that corresponds to your answer using the following guide for items 1 to 23.
  - If the item *does not apply to this course*, leave the cells blank.
  - If you *strongly agree* with the item, mark cell 5.
  - If you *agree* with the item, mark cell 4.
  - If you are *neutral (neither agree nor disagree)* with the item, mark cell 3.
  - If you *disagree* with the item, mark cell 2.
  - If you *strongly disagree* with the item, mark cell 1.
2. For items 24 and beyond, mark the appropriate response. Note that item 24 requires a "Yes" or "No" response. If there are additional items numbered 25, 26, 27, 28, and 29, darken the corresponding cells as you did for items 1 through 23.

Faculty/Instructor Name: \_\_\_\_\_

**Assessment:**

		S	A	N	D	SD
1	Expectations for graded assignments were clearly communicated.	5	4	3	2	1
2	Course activities (lectures, projects, etc.) helped me learn the course material.	5	4	3	2	1
3	Examinations, papers and other graded projects were returned in a reasonable amount of time.	5	4	3	2	1
4	The course was well organized.	5	4	3	2	1
5	The instructor helped me make connections between the content of this course and real life situations.	5	4	3	2	1
6	The instructor generally followed the stated course outline.	5	4	3	2	1
7	The instructor presented material in a clear and understandable manner.	5	4	3	2	1
8	Graded materials and activities covered the major points of the course.	5	4	3	2	1
9	The instructor gave helpful illustrations and examples in explaining application of the course materials.	5	4	3	2	1
10	The instructor seemed to be genuinely interested in what she/he was teaching.	5	4	3	2	1
11	The instructor was well prepared for classes.	5	4	3	2	1
12	I was able to get help in this course if I needed it.	5	4	3	2	1
13	I felt that the instructor put considerable effort into teaching this class.	5	4	3	2	1
14	The instructor was available outside of the regularly scheduled class time.	5	4	3	2	1
15	The instructor displayed an interest in students and their learning.	5	4	3	2	1
16	I really had to work to successfully complete the requirements in this course.	5	4	3	2	1
17	The instructor was enthusiastic about the subject matter of this course.	5	4	3	2	1
18	The instructor was receptive to the expression of student views.	5	4	3	2	1
19	The instructor stimulated my interest in the subject.	5	4	3	2	1
20	The subject matter in this course is difficult.	5	4	3	2	1
21	I was interested in the subject matter before I took this course.	5	4	3	2	1
22	Overall, I rate this as an excellent course.	5	4	3	2	1
23	Overall, I rate this instructor as an excellent teacher.	5	4	3	2	1
24	I was required to take this course.				2	1
25		5	4	3	2	1
26		5	4	3	2	1
27		5	4	3	2	1
28		5	4	3	2	1
29		5	4	3	2	1

**Written Response Items**

**Directions:** Please respond to items A and B in the spaces provided below.

**A** What did you like about this course?

\_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

**B** What changes would you recommend?

\_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

Thank you!

## Appendix 11.1

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### Drug Delivery 2 Dosage Form Poster Seminar Assignment

#### Overall:

Students will work as individuals to develop a poster, handout and three multiple choice questions for a commercially available dosage form or drug delivery device. The project must be professional in appearance, as if it were being presented at a professional conference.

#### Objective:

1. Identify pertinent information in the pharmaceutical literature about dosage form/drug delivery device.
2. Describe in detail the assigned dosage form/drug delivery device, and other information that is clinically relevant to their specific dosage form/drug delivery device.
3. Teach other students about their assigned dosage form/drug delivery device.

#### Required Elements:

##### 1. **Poster**

- Must be professionally printed – Use PowerPoint to make a single slide that can be printed as a poster
  - Ferris Prints them:
    - Ferris charges a flat rate of \$10, Staples between \$28 - \$48 (depending on what paper you use)
    - It will take 40 hours to print all 150 posters, you **MUST** get your poster to Kent Kachaterian in media production (FLITE 4<sup>th</sup> floor) approximately 10 days before the due date in order to be sure it will be printed in time. Kent will print them on a first come, first serve basis.
- Standard size poster – approximately 24 x 35 inches
  - No thick backing
- Font size must be large enough to be viewable
  - Google - Poster presentation guidelines
  - <http://abacus.bates.edu/~bpfohl/posters/>
  - Look up the poster guidelines for ASHP Mid Year Poster Presentations
- Submit on line the PowerPoint slide used to print the poster using the FerrisConnect assignment tool by 12:00 a.m. (midnight) on February 18.
- Turn in the printed poster by 12:00 p.m. (noon) on February 18.

##### 2. **2 Page Summary Handout**

- This is **NOT** a written paper
- Microsoft Office Word Format
- Important information (bulleted lists, images, graphs, etc)
  - Think of this as a list of take home points, what would you want your audience to remember?
- Hit all the important information about the dosage form and then add information that you couldn't fit on the poster
- Submit the 2 page handout on line using the FerrisConnect assignment tool by 12:00 a.m. (midnight) on February 18.
- Turn in hard copy of handout by 12:00 p.m. (noon) on February 18.

##### 3. **References and Bibliography**

- List all references in APA format
- A minimum of three references



- Prescribing information (package insert) - 1 reference
- Two primary references (NOT abstracts) - original research articles regarding your dosage form or your drug
  - You may use nonprimary references, just make sure at least two are primary.
  - You will need more than three references to complete this project
  - Place a star on your bibliography next to your primary references
- Turn in hard copies of your package insert by 12:00 p.m. (noon) on February 18.
- Turn in hard copies of two primary references by 12:00 p.m. (noon) on February 18 – the whole article, not the abstract.
- Turn in a hard copy of the bibliography by 12:00 p.m. (noon) on February 18.
- Submit the bibliography online using the FerrisConnect assignment tool by 12:00 a.m. (midnight) on February 18.

#### 4. Exam Questions

- Three multiple choice questions specific to the dosage form/drug delivery device with at least three legitimate choices for answers.
  - Questions must be specific to the dosage form/drug delivery device
  - NO questions about side effects, therapeutic use of the drug, etc... UNLESS they are unique to the dosage form.
- Submit the questions on line using the Studymate link on the FerrisConnect course homepage tool by 12:00 a.m. (midnight) on February 18.
- Turn in a hard copy of the question by 12:00 p.m. (noon) on February 18

#### Information to Include:

- **Description of dosage form/delivery system – this is the focus of the project!**
  - Description of the dosage form (sterile, pyrogen free, topical, IUD, extended release, hydrophilic matrix, etc...)
  - Release mechanism of drug
  - Explain in depth how the dosage form works and what ingredients or materials in the dosage form are critical to it working properly (what makes it delayed release?)
  - Schematic of the dosage form – diagram/picture
  - Rationale for delivering the drug in the assigned dosage form
    - Why is it an ophthalmic and not an oral?
    - Why is it an extended release instead of immediate release?
  - List of excipient ingredients and what their purpose in the dosage form is
  - Describe how the dosage form is administered/route of administration
  - Describe what the patient should know about the dosage form - ex) does it ghost
  - Plasma vs time curve if unique
  - Available strengths, dosing regimen
  - Storage
  - Other products using the same dosage form/delivery system
- Safety issues unique to the dosage form
- How is the dosage form handled in the pharmacy (especially if it is compounded)
- How much does it cost?
- Advantages/Disadvantages of the dosage form
- Physical and biological barriers the drug must cross to reach the systemic circulation
- Patient issues related to use of the dosage form

- ex) Can the patient cut the dosage form in half, does it ghost, where should it be applied or not applied, where should it be stored, should it be shaken, etc...
- Description of the active ingredient
  - Pharmacological class (ACE inhibitor, calcium channel blocker, etc....)
  - Primary indication (hypertension)
  - MAJOR side effects (dizziness)
- Name (make sure your name is on everything)
- Any additional important information
  - if you leave something off, that isn't listed here but is important you will lose points

**Audience:**

Professional presentation – pharmacist, physician or nurse

**Plagiarism:**

Make sure you reference all sources in you bibliography, including where images come from. Do NOT cut and paste word for word. Plagiarism will result in a 0 for the project.

**Where am I going to find this information?**

- Library
  - <http://www.ferris.edu/library/instruction/Classes/PHAR319.html>
  - Handbook of Pharmaceutical Excipients
  - Encyclopedia of Pharmaceutical Technology
  - All kinds of online resources
- Contact Drug Company
- References in Lab
- Web Sites – Google Images – BE CAREFUL that information is coming from legitimate sources
  - [www.dhmo.org](http://www.dhmo.org)
    - Is it real?

**What you will turn in by noon February 18, 2010**

1. Printed Poster
2. A packet stapled together with items in the following order:
  - Hard copy of three exam questions you submitted on line
  - Hard copy of a two page handout summarizing your poster
  - Hard copy of your Bibliography
  - Hard copy of the Package Insert
  - Printed out copies of 2 primary references

**What you will turn in by midnight February 18, 2010**

1. PowerPoint file of the Poster
2. Word file with three exam questions
3. Word file of the 2 page handout
4. Word file with the Bibliography

Attendance is mandatory at ALL of the poster presentation days. You will not receive any points for your poster if you do not attend ALL of the presentation days.

This assignment must be turned in on time - no credit will be given if turned in late

## Appendix 11.2

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### Pharmacokinetic Drug Project

#### Overall:

Students will work in small groups (2- 3 students) to develop a poster, handout and presentation for a drug that is monitored using pharmacokinetic or pharmacodynamics. The project must be professional in appearance as if it were being presented at a professional conference. Only clinically relevant information regarding the drug, its monitoring, and dosing should be included.

#### Objective:

1. The student will determine the method for determining/calculating an empiric and patient specific dosing regimen for a given drug, and describe pharmacokinetic parameters and issues used in determining/calculating the dosing regimens.
2. Student will communicate the method for determining/calculating the dosing regimen and the factors involved in dosing their given drug using a professional poster presentation and Tegrity recording.
3. Students will research pharmacokinetic literature and references to determine what information is clinically relevant in dosing a patient.
4. Students will work as a team and assess their peer's participation in the project
5. Students will teach other students the method for pharmacokinetic dosing of their drug.

#### Required Elements:

- Poster
  - All information must fit on a standard size piece of poster board - NO THICK Boards
  - Professional - appropriate font size, color, not cluttered, looks appealing, not an art project
  - Factually correct
  - Important information
  - May be printed at Media Services (fourth floor library) or other printer
- 2 Page Summary Handout
  - Important information (bulleted lists, graphs, etc.)
  - Supplemental information (things that didn't fit on the poster)
  - NOT a paper!!!
- 10 - 20 minute Presentation Recorded on Tegrity - any way you like! All group members must participate
- Peer Review of your partner(s) participation- end of semester questionnaire
- Bibliography - list of all references in APA format, on a separate page
  - A minimum of four references
  - the package insert = 1 reference
  - three primary references (NOT abstracts) - original research articles regarding your drug = 3 references
  - You should need more than three to accomplish this poster and may use non-primary references... just make sure you used at least 3 primary
  - Please put a star on your bibliography next to your primary references
  - You should need more than four to accomplish this poster

#### Audience:

Professional presentation - pharmacist, physician or nurse

#### Plagiarism:

Please make sure you reference all sources in your bibliography. Do NOT cut and paste word for word.

#### Examples of Important Information:

You must determine what information is important for your drug. These are NOT in order, please order them in an appropriate fashion for you drug.

**Name of Drug:** pharmacological class, primary indication

**Names of Group Members:**

**Therapeutic Use of Drug:** antimicrobial, antiepileptic, etc..

**Therapeutic Level:** normal, geriatric, pediatric, renal disease, etc..

**Side Effects:** clinically relevant

**Toxic Level and Signs of Toxicity:** physical signs of toxicity, monitoring, treatment of toxicity, etc...

**Cause of Toxicity:** mechanism for causing toxicity, what diseases, drugs, etc. lead to toxicity

**Typical PK Parameters:**  $t_{1/2}$ ,  $V_D$ , Cl, AUC, ADME, availability, uniqueness, etc...

**Special Populations:** renal and/or hepatic diseases, pediatric, geriatric, gastric bypass, etc

**Pregnancy/Lactating:** pregnancy risk, distribution across placenta, distribution into breast milk

**Drug interactions:** clinically relevant, herbals, diet, etc...

**Typical Dose:** empiric (initial dosing vs patient specific, rounding of dose, loading dose?, choices, etc...

**Plasma vs Time Curve:** for the typical dosing regimen, when should plasma concentrations be measured (blood draws)

**Equations used in Calculating Dosing Regimen:**

**Route/Method of Administration:** primary region of the small intestine where the drug is absorbed

**Pharmacokinetic/Pharmacodynamic monitoring:** blood draws - timing

**Reasons for Therapeutic Failure:**

**Dosing Regimens:** empiric and individualized (you may have to make a patient up to individualize)

### Drug List for Pharmacokinetics Project

1. gentamicin multiple intermittent iv infusion
2. once a day dosing of gentamicin
3. amikacin
4. tobramycin
5. vancomycin
6. digoxin
7. phenytoin/free phenytoin
8. warfarin (PD monitoring)
9. phenobarbital
10. lithium
11. carbamazepine
12. cyclosporine
13. valproic acid
14. tacrolimus
15. ethosuximide
16. theophylline
17. procainamide

## Appendix 11.3

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FERRIS STATE UNIVERSITY  
COLLEGE OF PHARMACY  
Pharmacy Assessment Portfolio  
Over-The-Counter Patient Assignment

The purpose of this assignment is to give the student an opportunity to react to a simple patient simulation related to an over-the-counter medication. This is the first of these assignments, and one that will give the student and faculty an opportunity to understand how principles presented in the first professional year are being integrated into clinical decision making.

SCENARIO: You are working in a local community (retail) pharmacy and are approached by a customer while you are standing in one of the over-the-counter aisles. The customer is an adult female (appears to be in her early 30's) accompanied by a young adolescent child. The child is in a soccer uniform and walking on crutches. Their left ankle is wrapped with a stretch bandage. The child seems to be in some pain. The adult female explains that she would like a pain reliever for the child.

Provide responses to the following questions. Type your responses into this document file, save the file with your last name included in the file name, and upload it to the portfolio system. Word your responses in narrative form and phrase them as you would if you were actually talking to the mother and child.

1. Are there any questions that you would ask of the mother or child?
2. What patient specific facts might govern your recommendation about a pain reliever?
3. What drug product related facts might govern your recommendations about a pain reliever (from a pharmaceuticals standpoint, as well as from the stand point of your course on non-prescription medications and self-care?)
4. What is your first and second recommendation?
5. What additional information would you provide to the mother and child?

## Appendix 12.1

Outcomes	PHAR: 311	PHAR: 312	PHAR: 315	PHAR: 316	PHAR: 318	PHAR: 319	PHAR: 328	PHAR: 334	PHAR: 335	PHAR: 340	PHAR: 385	PHAR: 386	PHAR: 393	PHAR: 411	PHAR: 412	PHAR: 413	PHAR: 414	PHAR: 421	PHAR: 422	PHAR: 425	PHAR: 428	PHAR: 485	PHAR: 486	PHAR: 491	PHAR: 493	PHAR: 511	PHAR: 512	PHAR: 513	PHAR: 514	PHAR: 525	PHAR: 530	PHAR: 535	PHAR: 540	PHAR: 585	PHAR: 586	PHAR: 589	PHAR: 591	PHAR: 680					
Communication (level 1)								W	M	M	M, R										M, R	W, R	M	W							W		M, R	W, R	M, R	M, R							
Communication (level 2)																						M, R	W, R	W, R	M, R					W		M, R	W, R	W, R	M, R	M, R							
Communication (level 3)																						M, R	W, R	W, R	M, R					W		M, R	W, R	M, R	M, R								
Diverse Adult Learning Strategies																																											
Health Promotion (level 1)								W	W	W	W	M										W	W								W		W	W	W	W							
Health Promotion (level 2)																																											
Health Promotion (level 3)			W	W				W	W	W	M	W	W	W																		W		W	W	W	W	W	W				
Patient-Specific and Population-based Disease Management (Level 1)	W	W	W	W	W	W	W	W	W	W	W	W	W	W	W	W	W	W	W	W	W	W	W	W	W	W	W	W	W	W	W	W	W	W	W	W	W	W	W	W	W		
Patient-Specific and Population-based Disease Management (Level 2)	W	W	W	W	W	W	W	W	W	W	W	W	W	W	W	W	W	W	W	W	W	W	W	W	W	W	W	W	W	W	W	W	W	W	W	W	W	W	W	W	W		
Patient-Specific and Population-based Disease Management (Level 3)								W	W	W	W	W	W	W	W	W	W	W	W	W	W	W	W	W	W	W	W	W	W	W	W	W	W	W	W	W	W	W	W	W	W	W	
Problem Solving (level 1)																																											
Problem Solving (level 2)			W	W																																							
Problem Solving (level 3)																																											
Professionalism (level 1)																																											
Professionalism (level 2)																																											
Professionalism (level 3) Part 1																																											
Professionalism (level 3) Part 2																																											
Professionalism (level 3) Part 3																																											
Systems Management (level 1) Part 1								W																																			

PHAR 1

PHAR 10

Outcomes	PHAR 311	PHAR 312	PHAR 315	PHAR 316	PHAR 318	PHAR 319	PHAR 328	PHAR 334	PHAR 335	PHAR 340	PHAR 385	PHAR 386	PHAR 393	PHAR 411	PHAR 412	PHAR 413	PHAR 414	PHAR 421	PHAR 422	PHAR 425	PHAR 428	PHAR 485	PHAR 486	PHAR 491	PHAR 493	PHAR 511	PHAR 512	PHAR 513	PHAR 514	PHAR 525	PHAR 530	PHAR 535	PHAR 540	PHAR 585	PHAR 586	PHAR 589	PHAR 591	PHAR 680
Systems Management - Level 1; Part 2;											W, R, W, R											M, R	W, R							W	W	M						
Systems Management - Level 2; Part 1;	-	-	-	-	-	-	-	-	-	-	I										M	M, R	W, R							W	W	M						
Systems Management - Level 2; Part 2;											I										M	M, R	W, R							W	W	M						
Systems Management - Level 2; Part 3;											I										M	M, R	W, R							W	W	M						
Systems Management - Level 3; Part 1;															I						W	M, R	W, R							W	W	M						
Systems Management - Level 3; Part 2;											I										M	M, R	W, R							W	W	M						
Systems Management - Level 3; Part 3;											I										M	M, R	W, R							W	W	M						

I - Introductory; M - Mastery; R - Reinforcement of Introductory or Mastery; W - Assessment Embedded (we have) Taught this yet

## Appendix 12.2

FERRIS STATE UNIVERSITY COLLEGE OF PHARMACY  
STUDENT ASSESSMENT OF ABILITY-BASED OUTCOMES P-1, P-2, P-3 (2009-2010)

Outcome Name	Outcome	Assessment Method Category	Assessment Method	Professional Year	Result Date	Result	Classification
Communication (Level 1)	Demonstrate basic communication skills and assess the quality of communication performance in situations involving reading, listening, writing, speaking, and use of data, media, and computers.	Survey - Students	Student self-assessment of ability-based outcomes conducted in the professional year 1 practice skills lab on: (Communication Fundamentals) Write and speak accurately and clearly during communications with patients, health professionals, peers and teachers.	P-1	5/7/2010	89.6% of P-1 students (Spring, 2010) strongly agree or agree that they demonstrate this competency (Communication Fundamentals)	Criterion Met
Communication (Level 1)	Demonstrate basic communication skills and assess the quality of communication performance in situations involving reading, listening, writing, speaking, and use of data, media, and computers.	Survey - Students	Student self-assessment of ability-based outcomes conducted in the professional year 1 practice skills lab on: (Cultural Competence) Demonstrate sensitivity and tolerance within multicultural interactions and settings.	P-1	5/7/2010	98.6% of P-1 students (Spring, 2010) strongly agree or agree that they demonstrate this competency (Cultural Competence)	Criterion Met
Communication (Level 1)	Demonstrate basic communication skills and assess the quality of communication performance in situations involving reading, listening, writing, speaking, and use of data, media, and computers.	Survey - Students	Student self-assessment of ability-based outcomes conducted in the professional year 1 practice skills lab on: (Documenting Care Plans) Understand the importance of documenting patient management activity in a patient profile or medical record to facilitate communication among healthcare providers.	P-1	5/7/2010	94.5% of P-1 students (Spring, 2010) strongly agree or agree that they demonstrate this competency (Documenting Care Plans).	Criterion Met
Communication (Level 1)	Demonstrate basic communication skills and assess the quality of communication performance in situations involving reading, listening, writing, speaking, and use of data, media, and computers.	Survey - Students	Student self-assessment of ability-based outcomes conducted in the professional year 1 practice skills lab on: (Empathy) Exhibit a caring and respectful attitude and demonstrate empathy while establishing rapport and communicating with the patient and/or caregiver.	P-1	5/7/2010	99.3% of P-1 students (Spring, 2010) strongly agree or agree that they demonstrate this competency (Empathy)	Criterion Met
Communication (Level 1)	Demonstrate basic communication skills and assess the quality of communication performance in situations involving reading, listening, writing, speaking, and use of data, media, and computers.	Survey - Students	Student self-assessment of ability-based outcomes conducted in the professional year 1 practice skills lab on: (Identifying Strengths and Weaknesses) Identify personal strengths, weaknesses, barriers and preferences in all modes of communication.	P-1	5/7/2010	94.4% of P-1 students (Spring, 2010) strongly agree or agree that they demonstrate this competency (Identifying Strengths and Weaknesses)	Criterion Met
Communication (Level 1)	Demonstrate basic communication skills and assess the quality of communication performance in situations involving reading, listening, writing, speaking, and use of data, media, and computers.	Survey - Students	Student self-assessment of ability-based outcomes conducted in the professional year 1 practice skills lab on: (Information and Media) Describe methods to relate the information to other health care professionals and patients/caregivers, including the appropriate media.	P-1	5/7/2010	89.6% of P-1 students (Spring, 2010) strongly agree or agree that they demonstrate this competency (Information and Media)	Criterion Met
Communication (Level 1)	Demonstrate basic communication skills and assess the quality of communication performance in situations involving reading, listening, writing, speaking, and use of data, media, and computers.	Survey - Students	Student self-assessment of ability-based outcomes conducted in the professional year 1 practice skills lab on: (Interpreting Ideas) Interpret ideas, thoughts and feelings communicated through reading.	P-1	5/7/2010	97.2% of P-1 students (Spring, 2010) strongly agree or agree that they demonstrate this competency (Interpreting Ideas)	Criterion Met
Communication (Level 1)	Demonstrate basic communication skills and assess the quality of communication performance in situations involving reading, listening, writing, speaking, and use of data, media, and computers.	Survey - Students	Student self-assessment of ability-based outcomes conducted in the professional year 1 practice skills lab on: (Using Data) Use data, media and computers to assist in communications with patients, health professionals, peers and teachers.	P-1	5/7/2010	98.6% of P-1 students (Spring, 2010) strongly agree or agree that they demonstrate this competency (Using Data)	Criterion Met
Communication (Level 2)	Demonstrate improvement in basic communication skills and exhibit creativity in communication situations through the use of reading, listening, writing, speaking, and use of data, media, and computers.	Survey - Students	Student self-assessment of ability-based outcomes conducted in the professional year 1 practice skills lab on: (Active Listening) Use active listening techniques during any verbal exchange of information.	P-1	5/7/2010	92.4% of P-1 students (Spring, 2010) strongly agree or agree that they demonstrate this competency (Active Listening)	Criterion Met



FERRIS STATE UNIVERSITY COLLEGE OF PHARMACY  
STUDENT ASSESSMENT OF ABILITY-BASED OUTCOMES P-1, P-2, P-3 (2009-2010)

Outcome Name	Outcome	Assessment Method Category	Assessment Method	Professional Year	Result Date	Result	Classification
Communication (Level 2)	Demonstrate improvement in basic communication skills and exhibit creativity in communication situations through the use of reading, listening, writing, speaking, and use of data, media, and computers.	Survey - Students	Student self-assessment of ability-based outcomes conducted in the professional year 1 practice skills lab on: (Digital Media) Use computer technology creatively to convey information and proposal in narrative, graphic and tabular modes.	P-1	5/7/2010	88.9% of P-1 students (Spring, 2010) strongly agree or agree that they demonstrate this competency (Digital Media)	Criterion Met
Communication (Level 2)	Demonstrate improvement in basic communication skills and exhibit creativity in communication situations through the use of reading, listening, writing, speaking, and use of data, media, and computers.	Survey - Students	Student self-assessment of ability-based outcomes conducted in the professional year 1 practice skills lab on: (Groups) Use writing, speaking, data, and media creatively to convey convincing messages, both individually and in groups.	P-1	5/7/2010	93.8% of P-1 students (Spring, 2010) strongly agree or agree that they demonstrate this competency (Groups)	Criterion Met
Communication (Level 3)	Communicate clearly, accurately, compassionately, confidently, effectively and persuasively using a variety of methods (i.e. reading, listening, writing, speaking, and the use of data, media, and computer skills) and with a variety of target audiences.	Survey - Students	Student self-assessment of ability-based outcomes conducted in the professional year 1 practice skills lab on: (Choosing Methods) Choose communication methods appropriate to the purpose of the interaction.	P-1	5/7/2010	95.8% of P-1 students (Spring, 2010) strongly agree or agree that they demonstrate this competency (Choosing Methods)	Criterion Met
Health Promotion (Level 1)	Describe the basic elements of emergency care and health promotion.	Survey - Students	Student self-assessment of ability-based outcomes conducted in the professional year 1 practice skills lab on: (Emergency Situations) Describe emergency situations requiring medical care and the role of pharmacists in these situations including first aid, disasters and poison control.	P-1	5/7/2010	72.9% of P-1 students (Spring, 2010) strongly agree or agree that they demonstrate this competency (Emergency Situations)	Criterion Met
Health Promotion (Level 1)	Describe the basic elements of emergency care and health promotion.	Survey - Students	Student self-assessment of ability-based outcomes conducted in the professional year 1 practice skills lab on: (Health Factors) Identify the basic concepts of health promotion including determinants of health, factors contributing to health promotion, and factors influencing the use of health services.	P-1	5/7/2010	88.9% of P-1 students (Spring, 2010) strongly agree or agree that they demonstrate this competency (Health Factors)	Criterion Met
Health Promotion (Level 1)	Describe the basic elements of emergency care and health promotion.	Survey - Students	Student self-assessment of ability-based outcomes conducted in the professional year 1 practice skills lab on: (Substance Abuse) Describe the signs and symptoms of substance abuse.	P-1	5/7/2010	89.5% of P-1 students (Spring, 2010) strongly agree or agree that they demonstrate this competency (Substance Abuse)	Criterion Met
Health Promotion (Level 2)	Provide emergency care and develop health promotion services.	Survey - Students	Student self-assessment of ability-based outcomes conducted in the professional year 1 practice skills lab on: (BLS) Obtain first aid/basic life support certification.	P-1	5/7/2010	98.6% of P-1 students (Spring, 2010) strongly agree or agree that they demonstrate this competency (BLS).	Criterion Met
Patient-Specific and Population-based Disease Management (Level 1)	Gather, organize and evaluate information in order to provide patient-specific and population-based disease management.	Survey - Students	Student self-assessment of ability-based outcomes conducted in the professional year 1 practice skills lab on: (Biochemistry) Describe important biochemistry principles that apply to drugs associated with the patient-specific and/or population-based disease management plan.	P-1	5/7/2010	52.7% of P-1 students (Spring, 2010) strongly agree or agree that they demonstrate this competency (Biochemistry).	Criterion Not Met
Patient-Specific and Population-based Disease Management (Level 1)	Gather, organize and evaluate information in order to provide patient-specific and population-based disease management.	Survey - Students	Student self-assessment of ability-based outcomes conducted in the professional year 1 practice skills lab on: (Cultural Influence) Describe the relevant cultural and societal influences on patient-specific and population-based disease management with emphasis on the appropriate or inappropriate use of drug therapy.	P-1	5/7/2010	84.7% of P-1 students (Spring, 2010) strongly agree or agree that they demonstrate this competency (Cultural Influence)	Criterion Met

FERRIS STATE UNIVERSITY COLLEGE OF PHARMACY  
STUDENT ASSESSMENT OF ABILITY-BASED OUTCOMES P-1, P-2, P-3 (2009-2010)

Outcome Name	Outcome	Assessment Method Category	Assessment Method	Professional Year	Result Date	Result	Classification
Patient-Specific and Population-based Disease Management (Level 1)	Gather, organize and evaluate information in order to provide patient-specific and population-based disease management.	Survey - Students	Student self-assessment of ability-based outcomes conducted in the professional year 1 practice skills lab on: (Dispensing) Describe the dispensing process as it relates to different medication use systems.	P-1	5/7/2010	86.8% of P-1 students (Spring, 2010) strongly agree or agree that they demonstrate this competency (Dispensing)	Criterion Met
Patient-Specific and Population-based Disease Management (Level 1)	Gather, organize and evaluate information in order to provide patient-specific and population-based disease management.	Survey - Students	Student self-assessment of ability-based outcomes conducted in the professional year 1 practice skills lab on: (Documentation) Describe the value of documenting patient-specific and/or population-based disease management activities.	P-1	5/7/2010	86.8% of P-1 students (Spring, 2010) strongly agree or agree that they demonstrate this competency (Documentation)	Criterion Met
Patient-Specific and Population-based Disease Management (Level 1)	Gather, organize and evaluate information in order to provide patient-specific and population-based disease management.	Survey - Students	Student self-assessment of ability-based outcomes conducted in the professional year 1 practice skills lab on: (History of Pharmacy) List or describe different milestones in the history of pharmacy.	P-1	5/7/2010	81.3% of P-1 students (Spring, 2010) strongly agree or agree that they demonstrate this competency (History of Pharmacy)	Criterion Met
Patient-Specific and Population-based Disease Management (Level 1)	Gather, organize and evaluate information in order to provide patient-specific and population-based disease management.	Survey - Students	Student self-assessment of ability-based outcomes conducted in the professional year 1 practice skills lab on: (Information Retrieval) Retrieve information useful in making dispensing and compounding decisions.	P-1	5/7/2010	95.8% of P-1 students (Spring, 2010) strongly agree or agree that they demonstrate this competency (Information Retrieval).	Criterion Met
Patient-Specific and Population-based Disease Management (Level 1)	Gather, organize and evaluate information in order to provide patient-specific and population-based disease management.	Survey - Students	Student self-assessment of ability-based outcomes conducted in the professional year 1 practice skills lab on: (Medication Administration) Describe the various medication administration techniques.	P-1	5/7/2010	93.1% of P-1 students (Spring, 2010) strongly agree or agree that they demonstrate this competency (Medication Administration)	Criterion Met
Patient-Specific and Population-based Disease Management (Level 1)	Gather, organize and evaluate information in order to provide patient-specific and population-based disease management.	Survey - Students	Student self-assessment of ability-based outcomes conducted in the professional year 1 practice skills lab on: (Online References) Identify appropriate online information resources.	P-1	5/7/2010	100% of P-1 students (Spring, 2010) strongly agree or agree that they demonstrate this competency (Online References)	Criterion Met
Patient-Specific and Population-based Disease Management (Level 1)	Gather, organize and evaluate information in order to provide patient-specific and population-based disease management.	Survey - Students	Student self-assessment of ability-based outcomes conducted in the professional year 1 practice skills lab on: (Pathophysiology) Describe the basic pathophysiology of major disease state that I might encounter in patient-specific and/or population-based disease management plan.	P-1	5/7/2010	93.1% of P-1 students (Spring, 2010) strongly agree or agree that they demonstrate this competency (Pathophysiology)	Criterion Met
Patient-Specific and Population-based Disease Management (Level 1)	Gather, organize and evaluate information in order to provide patient-specific and population-based disease management.	Survey - Students	Student self-assessment of ability-based outcomes conducted in the professional year 1 practice skills lab on: (Patient-Centered Care) Describe the rationale for the shift in practice from product to patient-centered care.	P-1	5/7/2010	97.9% of P-1 students (Spring, 2010) strongly agree or agree that they demonstrate this competency (Patient-Centered Care).	Criterion Met
Patient-Specific and Population-based Disease Management (Level 1)	Gather, organize and evaluate information in order to provide patient-specific and population-based disease management.	Survey - Students	Student self-assessment of ability-based outcomes conducted in the professional year 1 practice skills lab on: (Pharmaceutics) Describe the pharmaceuticals of different dosage forms associated with prescription, non-prescription and dietary supplements used in the patient-specific and/or population-based disease management plan.	P-1	5/7/2010	86.8% of P-1 students (Spring, 2010) strongly agree or agree that they demonstrate this competency (Pharmaceutics)	Criterion Met
Patient-Specific and Population-based Disease Management (Level 1)	Gather, organize and evaluate information in order to provide patient-specific and population-based disease management.	Survey - Students	Student self-assessment of ability-based outcomes conducted in the professional year 1 practice skills lab on: (Routes of Administration) Describe the routes of administration and the appropriate drug delivery dosage form for the management of a specific patient (e.g. pediatric, geriatric) or therapeutic problem.	P-1	5/7/2010	93.7% of P-1 students (Spring, 2010) strongly agree or agree that they demonstrate this competency (Routes of Administration)	Criterion Met

FERRIS STATE UNIVERSITY COLLEGE OF PHARMACY  
 STUDENT ASSESSMENT OF ABILITY-BASED OUTCOMES P-1, P-2, P-3 (2009-2010)

Outcome Name	Outcome	Assessment Method Category	Assessment Method	Professional Year	Result Date	Result	Classification
Patient-Specific and Population-based Disease Management (Level 2)	Analyze patient information in order to provide patient-specific and population-based disease management.	Survey - Students	Student self-assessment of ability-based outcomes conducted in the professional year 1 practice skills lab on: (Biochemistry) Relate relevant biochemistry to a patient-specific and/or population-based disease management plan.	P-1	5/7/2010	45.1% of P-1 students (Spring, 2010) strongly agree or agree that they demonstrate this competency (Biochemistry).	Criterion Not Met
Patient-Specific and Population-based Disease Management (Level 2)	Analyze patient information in order to provide patient-specific and population-based disease management.	Survey - Students	Student self-assessment of ability-based outcomes conducted in the professional year 1 practice skills lab on: (Compounding and Dispensing) Compound, prepare and dispense prescription products accurately and safely.	P-1	5/7/2010	96.8% of P-1 students (Spring, 2010) strongly agree or agree that they demonstrate this competency (Compounding and Dispensing).	Criterion Met
Patient-Specific and Population-based Disease Management (Level 2)	Analyze patient information in order to provide patient-specific and population-based disease management.	Survey - Students	Student self-assessment of ability-based outcomes conducted in the professional year 1 practice skills lab on: (Drug Adherence) Articulate patient-related and system-related factors contributing to adherence.	P-1	5/7/2010	95.2% of P-1 students (Spring, 2010) strongly agree or agree that they demonstrate this competency (Drug Adherence).	Criterion Met
Patient-Specific and Population-based Disease Management (Level 2)	Analyze patient information in order to provide patient-specific and population-based disease management.	Survey - Students	Student self-assessment of ability-based outcomes conducted in the professional year 1 practice skills lab on: (Drug Calculations) Calculate equivalent dosages for drug products which vary according to their manufacturer, delivery system, route of administration and/or salt form.	P-1	5/7/2010	89.6% of P-1 students (Spring, 2010) strongly agree or agree that they demonstrate this competency (Drug Calculations).	Criterion Met
Patient-Specific and Population-based Disease Management (Level 2)	Analyze patient information in order to provide patient-specific and population-based disease management.	Survey - Students	Student self-assessment of ability-based outcomes conducted in the professional year 1 practice skills lab on: (History of Pharmacy) Apply knowledge of the historical underpinnings of pharmacy to principles of interprofessional practice.	P-1	5/7/2010	76.8% of P-1 students (Spring, 2010) strongly agree or agree that they demonstrate this competency (History of Pharmacy).	Criterion Met
Patient-Specific and Population-based Disease Management (Level 2)	Analyze patient information in order to provide patient-specific and population-based disease management.	Survey - Students	Student self-assessment of ability-based outcomes conducted in the professional year 1 practice skills lab on: (Pathophysiology) Relate relevant pathophysiology to a patient-specific and/or population-based disease management plan.	P-1	5/7/2010	95.0% of P-1 students (Spring, 2010) strongly agree or agree that they demonstrate this competency (Pathophysiology).	Criterion Met
Patient-Specific and Population-based Disease Management (Level 2)	Analyze patient information in order to provide patient-specific and population-based disease management.	Survey - Students	Student self-assessment of ability-based outcomes conducted in the professional year 1 practice skills lab on: (Pharmaceutics) Relate relevant pharmaceutics to a patient-specific and/or population-based disease management plan.	P-1	5/7/2010	84.8% of P-1 students (Spring, 2010) strongly agree or agree that they demonstrate this competency (Pharmaceutics).	Criterion Met
Systems Management (Level 1; Part 1)	Specify elements necessary for purchasing, preparing, dispensing, distributing and administering medications and maintaining adequate inventory control.	Survey - Students	Student self-assessment of ability-based outcomes conducted in the professional year 1 practice skills lab on: (History) List some of the historical events that have shaped the practice of pharmacy in the U.S.	P-1	5/7/2010	87.5% of P-1 students (Spring, 2010) strongly agree or agree that they demonstrate this competency (History).	Criterion Met
Systems Management (Level 1; Part 1)	Specify elements necessary for purchasing, preparing, dispensing, distributing and administering medications and maintaining adequate inventory control.	Survey - Students	Student self-assessment of ability-based outcomes conducted in the professional year 1 practice skills lab on: (Managing Technical and Professional Staff) Describe the different roles and responsibilities of professional and technical personnel in different types of pharmacy operations and clinical microsystems.	P-1	5/7/2010	84.1% of P-1 students (Spring, 2010) strongly agree or agree that they demonstrate this competency (Managing Technical and Professional Staff).	Criterion Met
Systems Management (Level 1; Part 1)	Specify elements necessary for purchasing, preparing, dispensing, distributing and administering medications and maintaining adequate inventory control.	Survey - Students	Student self-assessment of ability-based outcomes conducted in the professional year 1 practice skills lab on: (Patient-Centered Care Shift) Discuss the rationale (historical and contemporary) for the shift in pharmacy practice from product focused to patient care focused.	P-1	5/7/2010	96.5% of P-1 students (Spring, 2010) strongly agree or agree that they demonstrate this competency (Patient Centered Care Shift).	Criterion Met

FERRIS STATE UNIVERSITY COLLEGE OF PHARMACY  
STUDENT ASSESSMENT OF ABILITY-BASED OUTCOMES P-1, P-2, P-3 (2009-2010)

Outcome Name	Outcome	Assessment Method Category	Assessment Method	Professional Year	Result Date	Result	Classification
Systems Management (Level 1; Part 1)	Specify elements necessary for purchasing, preparing, dispensing, distributing and administering medications and maintaining adequate inventory control.	Survey - Students	Student self-assessment of ability-based outcomes conducted in the professional year 1 practice skills lab on: (U.S. Health Care System) Describe the basic structure and function of the U.S. health care system, and currently available medication distribution systems.	P-1	5/7/2010	75.7% of P-1 students (Spring, 2010) strongly agree or agree that they demonstrate this competency (U.S. Health Care System).	Criterion Met
Systems Management (Level 1; Part 2)	State the components necessary to manage DIFFERENT TYPES OF pharmacy operations with consideration of management principles, law and ethics.	Survey - Students	Student self-assessment of ability-based outcomes conducted in the professional year 1 practice skills lab on: (Indigent Patient Populations) Describe the role of indigent care prescription drug programs in the delivery of medications for those in need, without prescription benefit insurance or adequate financial means.	P-1	5/7/2010	68.7% of P-1 students (Spring, 2010) strongly agree or agree that they demonstrate this competency (Indigent Patient Populations)	Criterion Met
Communication (Level 2)	Demonstrate improvement in basic communication skills and exhibit creativity in communication situations through the use of reading, listening, writing, speaking, and use of data, media, and computers.	Survey - Students	Student self-assessment of ability-based outcomes conducted in the professional year 1 practice skills lab on: (Interdisciplinary Communication) Establish collaborative relationships with other healthcare professionals that foster a team.	P-2	2/5/2010	73.6% of student accelerators in Fall, 2009 strongly agree or agree that they demonstrate this competency.	Criterion Met
Communication (Level 2)	Demonstrate improvement in basic communication skills and exhibit creativity in communication situations through the use of reading, listening, writing, speaking, and use of data, media, and computers.	Survey - Students	Student self-assessment of ability-based outcomes conducted in the professional year 2 practice skills lab on: (Health Information) Effectively communicate drug and health information at appropriate levels for patients and healthcare professionals.	P-2	2/5/2010	94.3% of student accelerators in Fall, 2009 strongly agree or agree that they demonstrate this competency.	Criterion Met
Communication (Level 3)	Communicate clearly, accurately, compassionately, confidently, effectively and persuasively using a variety of methods (i.e. reading, listening, writing, speaking, and the use of data, media, and computer skills) and with a variety of target audiences.	Survey - Students	Student self-assessment of ability-based outcomes conducted in the professional year 2 practice skills lab on: (Assessing the Audience) Assess the target audience to ensure the correct message was received.	P-2	2/5/2010	92.6% of student accelerators in Fall, 2009 strongly agree or agree that they demonstrate this competency.	Criterion Met
Communication (Level 3)	Communicate clearly, accurately, compassionately, confidently, effectively and persuasively using a variety of methods (i.e. reading, listening, writing, speaking, and the use of data, media, and computer skills) and with a variety of target audiences.	Survey - Students	Student self-assessment of ability-based outcomes conducted in the professional year 2 practice skills lab on: (Conflict Resolution) Use conflict resolution when managing human resources.	P-2	2/5/2010	79.2% of student accelerators in Fall, 2009 strongly agree or agree that they demonstrate this competency.	Criterion Met
Communication (Level 3)	Communicate clearly, accurately, compassionately, confidently, effectively and persuasively using a variety of methods (i.e. reading, listening, writing, speaking, and the use of data, media, and computer skills) and with a variety of target audiences.	Survey - Students	Student self-assessment of ability-based outcomes conducted in the professional year 2 practice skills lab on: (Targeted Audiences) Construct messages appropriate to the target audience to deliver information clearly and in a manner in which the message is heard.	P-2	2/5/2010	94.3% of student accelerators in Fall, 2009 strongly agree or agree that they demonstrate this competency.	Criterion Met
Patient-Specific and Population-based Disease Management (Level 1)	Gather, organize and evaluate information in order to provide patient-specific and population-based disease management.	Survey - Students	Student self-assessment of ability-based outcomes conducted in the professional year 2 practice skills lab on: (Home Diagnostics) Explain the use of devices and other means for detecting and/or monitoring diseases.	P-2	2/5/2010	71.7% of student accelerators in Fall, 2009 strongly agree or agree that they demonstrate this competency. (Home Diagnostics)	Criterion Met

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STUDENT ASSESSMENT OF ABILITY-BASED OUTCOMES P-1, P-2, P-3 (2009-2010)

Outcome Name	Outcome	Assessment Method Category	Assessment Method	Professional Year	Result Date	Result	Classification
Patient-Specific and Population-based Disease Management (Level 1)	Gather, organize and evaluate information in order to provide patient-specific and population-based disease management.	Survey - Students	Student self-assessment of ability-based outcomes conducted in the professional year 2 practice skills lab on: (Medicinal Chemistry) Describe the medicinal chemistry of prescription, non-prescription and dietary supplements used in the patient-specific and/or population-based disease management plan.	P-2	2/5/2010	64.7% of student accelerators in Fall, 2009 strongly agree or agree that they demonstrate this competency. (Medicinal Chemistry)	Criterion Not Met
Patient-Specific and Population-based Disease Management (Level 1)	Gather, organize and evaluate information in order to provide patient-specific and population-based disease management.	Survey - Students	Student self-assessment of ability-based outcomes conducted in the professional year 2 practice skills lab on: (Pharmacokinetics) Describe the pharmacokinetics of some of the fundamental agents associated with prescription, non-prescription and dietary supplements used in the patient-specific and/or population-based disease management plan.	P-2	2/5/2010	75.6% of student accelerators in Fall, 2009 strongly agree or agree that they demonstrate this competency. (Pharmacokinetics)	Criterion Met
Patient-Specific and Population-based Disease Management (Level 1)	Gather, organize and evaluate information in order to provide patient-specific and population-based disease management.	Survey - Students	Student self-assessment of ability-based outcomes conducted in the professional year 2 practice skills lab on: (Pharmacology) Describe the pharmacology of prescription, non-prescription and dietary supplements used in the patient-specific and/or population-based disease management plan.	P-2	2/5/2010	86.8% of student accelerators in Fall, 2009 strongly agree or agree that they demonstrate this competency. (Pharmacology)	Criterion Met
Patient-Specific and Population-based Disease Management (Level 1)	Gather, organize and evaluate information in order to provide patient-specific and population-based disease management.	Survey - Students	Student self-assessment of ability-based outcomes conducted in the professional year 2 practice skills lab on: (Physical Assessment) Explain the components of physical assessment.	P-2	2/5/2010	75.6% of student accelerators in Fall, 2009 strongly agree or agree that they demonstrate this competency. (Physical Assessment)	Criterion Met
Patient-Specific and Population-based Disease Management (Level 1)	Gather, organize and evaluate information in order to provide patient-specific and population-based disease management.	Survey - Students	Student self-assessment of ability-based outcomes conducted in the professional year 2 practice skills lab on: (Special Populations) Describe pathophysiologic and pharmacotherapy alterations specific for special population patients (e.g., pediatric, geriatric, pregnant, cystic fibrosis, sickle cell anemia, celiac disease, genetic disorders, and others).	P-2	2/5/2010	66.6% of student accelerators in Fall, 2009 strongly agree or agree that they demonstrate this competency. (Special Populations)	Criterion Not Met
Patient-Specific and Population-based Disease Management (Level 2)	Analyze patient information in order to provide patient-specific and population-based disease management.	Survey - Students	Student self-assessment of ability-based outcomes conducted in the professional year 2 practice skills lab on: (Pharmacokinetic Dosing) Calculate dosage regimens using pharmacokinetic principles.	P-2	2/5/2010	88.7% of student accelerators in Fall, 2009 strongly agree or agree that they demonstrate this competency. (Pharmacokinetic Dosing)	Criterion Met
Patient-Specific and Population-based Disease Management (Level 2)	Analyze patient information in order to provide patient-specific and population-based disease management.	Survey - Students	Student self-assessment of ability-based outcomes conducted in the professional year 2 practice skills lab on: (Pharmacokinetics) Relate relevant pharmacokinetics to a patient-specific and/or population-based disease management plan.	P-2	2/5/2010	84.9% of student accelerators in Fall, 2009 strongly agree or agree that they demonstrate this competency. (Pharmacokinetics)	Criterion Met
Patient-Specific and Population-based Disease Management (Level 2)	Analyze patient information in order to provide patient-specific and population-based disease management.	Survey - Students	Student self-assessment of ability-based outcomes conducted in the professional year 2 practice skills lab on: (Pharmacology) Relate relevant pharmacology to a patient-specific and/or population-based disease management plan.	P-2	2/5/2010	92.5% of student accelerators in Fall, 2009 strongly agree or agree that they demonstrate this competency. (Pharmacology)	Criterion Met

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STUDENT ASSESSMENT OF ABILITY-BASED OUTCOMES P-1, P-2, P-3 (2009-2010)

Outcome Name	Outcome	Assessment Method Category	Assessment Method	Professional Year	Result Date	Result	Classification
Patient-Specific and Population-based Disease Management (Level 2)	Analyze patient information in order to provide patient-specific and population-based disease management.	Survey - Students	Student self-assessment of ability-based outcomes conducted in the professional year 2 practice skills lab on: (Special Populations) Relate alterations specific for special population patients to dosage calculation and adjustments, and drug monitoring in special-population patients.	P-2	2/5/2010	79.2% of student accelerators in Fall, 2009 strongly agree or agree that they demonstrate this competency. (Special Populations)	Criterion Met
Patient-Specific and Population-based Disease Management (Level 2)	Analyze patient information in order to provide patient-specific and population-based disease management.	Survey - Students	Student self-assessment of ability-based outcomes conducted in the professional year 2 practice skills lab on: (Using Online Resources) Exhibit the ability to utilize appropriate online information resources.	P-2	2/5/2010	100% of student accelerators in Fall, 2009 strongly agree or agree that they demonstrate this competency. (Using Online Resources)	Criterion Met
Systems Management (Level 1; Part 1)	Specify elements necessary for purchasing, preparing, dispensing, distributing and administering medications and maintaining adequate inventory control.	Survey - Students	Student self-assessment of ability-based outcomes conducted in the professional year 2 practice skills lab on: (Quality Control) Describe the storage, packaging and quality control tests performed to assure that the dosage form meets USP requirements.	P-2	2/5/2010	81.1% of student accelerators in Fall, 2009 strongly agree or agree that they demonstrate this competency. (Quality Control)	Criterion Met
Systems Management (Level 1; Part 2)	State the components necessary to manage DIFFERENT TYPES OF pharmacy operations with consideration of management principles, law and ethics.	Survey - Students	Student self-assessment of ability-based outcomes conducted in the professional year 2 practice skills lab on: (Marketing) Describe different marketing principles that apply to pharmacy operations.	P-2	2/5/2010	67.9% of student accelerators in Fall, 2009 strongly agree or agree that they demonstrate this competency. (Marketing)	Criterion Met
Systems Management (Level 2; Part 1)	Identify and analyze characteristics associated with purchasing, preparing, dispensing, distributing and administering medications and maintaining adequate inventory control.	Survey - Students	Student self-assessment of ability-based outcomes conducted in the professional year 2 practice skills lab on: (Continuity of Care) List the obstacles that a patient might encounter when transitioning their prescriptions between different care settings (e.g. community pharmacy to hospital; hospital to nursing home; nursing home to community pharmacy; etc.).	P-2	2/5/2010	69.8% of student accelerators in Fall, 2009 strongly agree or agree that they demonstrate this competency. (Continuity of Care)	Criterion Met
Systems Management (Level 2; Part 1)	Identify and analyze characteristics associated with purchasing, preparing, dispensing, distributing and administering medications and maintaining adequate inventory control.	Survey - Students	Student self-assessment of ability-based outcomes conducted in the professional year 2 practice skills lab on: (Managing Safe Medication Systems) List the things that might cause medication errors in a contemporary dispensing pharmacy, and how they might be managed to improve patient care.	P-2	2/5/2010	96.2% of student accelerators in Fall, 2009 strongly agree or agree that they demonstrate this competency. (Managing Safe Medication Use)	Criterion Met
Systems Management (Level 2; Part 1)	Identify and analyze characteristics associated with purchasing, preparing, dispensing, distributing and administering medications and maintaining adequate inventory control.	Survey - Students	Student self-assessment of ability-based outcomes conducted in the professional year 2 practice skills lab on: (Medication Use System Safety) Identify the medication use system specific characteristics that are susceptible to flaws in prescribing, dispensing and use.	P-2	2/5/2010	92.5% of student accelerators in Fall, 2009 strongly agree or agree that they demonstrate this competency. (Medication Use Safety)	Criterion Met
Systems Management (Level 2; Part 1)	Identify and analyze characteristics associated with purchasing, preparing, dispensing, distributing and administering medications and maintaining adequate inventory control.	Survey - Students	Student self-assessment of ability-based outcomes conducted in the professional year 2 practice skills lab on: (Prescription Benefit Management) Describe the role and function of prescription benefit plans including relevant federal (e.g. Medicare, Medicaid) and state plans.	P-2	2/5/2010	77.4% of student accelerators in Fall, 2009 strongly agree or agree that they demonstrate this competency. (Prescription Benefit Management)	Criterion Met
Systems Management (Level 2; Part 1)	Identify and analyze characteristics associated with purchasing, preparing, dispensing, distributing and administering medications and maintaining adequate inventory control.	Survey - Students	Student self-assessment of ability-based outcomes conducted in the professional year 2 practice skills lab on: (Selecting Automation) List the important characteristics, which must be considered when evaluating, selecting and implementing automated technology.	P-2	2/5/2010	94.3% of student accelerators in Fall, 2009 strongly agree or agree that they demonstrate this competency. (Selecting Automation)	Criterion Met

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 STUDENT ASSESSMENT OF ABILITY-BASED OUTCOMES P-1, P-2, P-3 (2009-2010)

Outcome Name	Outcome	Assessment Method Category	Assessment Method	Professional Year	Result Date	Result	Classification
Systems Management (Level 2, Part 1)	Identify and analyze characteristics associated with purchasing, preparing, dispensing, distributing and administering medications and maintaining adequate inventory control.	Survey - Students	Student self-assessment of ability-based outcomes conducted in the professional year 2 practice skills lab on: (Special Populations) List the advantages and disadvantages of relevant health care and drug distribution system for the management of a specific patient (e.g., pediatric, geriatric) or therapeutic problem.	P-2	2/5/2010	83% of student accelerators in Fall, 2009 strongly agree or agree that they demonstrate this competency. (Special Populations)	Criterion Met
Systems Management (Level 2, Part 2)	Demonstrate advanced skills in managing pharmacy operations, human resources, logistics fiscal management, law and ethics.	Survey - Students	Student self-assessment of ability-based outcomes conducted in the professional year 2 practice skills lab on: (Civil and Criminal Law) Describe relevant civil and criminal law that influences practice and malpractice in pharmacy.	P-2	2/5/2010	67.9% of student accelerators in Fall, 2009 strongly agree or agree that they demonstrate this competency. (Civil and Criminal Law)	Criterion Met
Systems Management (Level 2, Part 2)	Demonstrate advanced skills in managing pharmacy operations, human resources, logistics fiscal management, law and ethics.	Survey - Students	Student self-assessment of ability-based outcomes conducted in the professional year 2 practice skills lab on: (Jurisprudence) Outline some of the important pharmacy laws that impact how you are able to function at an experiential site or internship.	P-2	2/5/2010	69.8% of student accelerators in Fall, 2009 strongly agree or agree that they demonstrate this competency. (Jurisprudence)	Criterion Met
Systems Management (Level 2, Part 2)	Demonstrate advanced skills in managing pharmacy operations, human resources, logistics fiscal management, law and ethics.	Survey - Students	Student self-assessment of ability-based outcomes conducted in the professional year 2 practice skills lab on: (Logistics HR and Financial Management) Identify the important issues in human resource management (e.g. labor law, disciplinary procedures, hiring and interviewing) and how they impact pharmacists and technicians in different care settings (i.e. community or hospital).	P-2	2/5/2010	86.8% of student accelerators in Fall, 2009 strongly agree or agree that they demonstrate this competency. (Logistics, HR and Financial Management)	Criterion Met
Systems Management (Level 2, Part 2)	Demonstrate advanced skills in managing pharmacy operations, human resources, logistics fiscal management, law and ethics.	Survey - Students	Student self-assessment of ability-based outcomes conducted in the professional year 2 practice skills lab on: (Managing Pharmacy Systems) List the site specific characteristics that influence managerial decisions related to the operations of a pharmacy practice including logistics (supply chain management) and human resource.	P-2	2/5/2010	77.4% of student accelerators in Fall, 2009 strongly agree or agree that they demonstrate this competency. (Managing Pharmacy Systems)	Criterion Met
Systems Management (Level 2, Part 2)	Demonstrate advanced skills in managing pharmacy operations, human resources, logistics fiscal management, law and ethics.	Survey - Students	Student self-assessment of ability-based outcomes conducted in the professional year 2 practice skills lab on: (Marketing) Describe different marketing principles as they would apply to contemporary pharmacy operations.	P-2	2/5/2010	84.9% of student accelerators in Fall, 2009 strongly agree or agree that they demonstrate this competency. (Marketing)	Criterion Met
Systems Management (Level 2, Part 3)	Identify the elements of, and develop systems for the reporting of medication errors and ADR's, for the conduct of DUE, and for the maintenance of a formulary system.	Survey - Students	Student self-assessment of ability-based outcomes conducted in the professional year 2 practice skills lab on: (Informatics) List how different "informatics" tools (computers, internet, multimedia, pharmacy patient information systems; general health information systems) are important to the delivery of patient-centered pharmacy services, and drug distribution.	P-2	2/5/2010	90.6% of student accelerators in Fall, 2009 strongly agree or agree that they demonstrate this competency. (Informatics)	Criterion Met
Systems Management (Level 3, Part 1)	Apply information regarding purchasing, preparing, dispensing, distributing and administering medications and purchasing other supplies to optimize pharmaceutical care.	Survey - Students	Student self-assessment of ability-based outcomes conducted in the professional year 2 practice skills lab on: (Negligence) Identify the role of negligence law in professional malpractice; and interpret all relevant Michigan case law that is relevant to shaping the common law duties of a pharmacist.	P-2	2/5/2010	83% of student accelerators in Fall, 2009 strongly agree or agree that they demonstrate this competency. (Negligence)	Criterion Met

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STUDENT ASSESSMENT OF ABILITY-BASED OUTCOMES P-1, P-2, P-3 (2009-2010)

Outcome Name	Outcome	Assessment Method Category	Assessment Method	Professional Year	Result Date	Result	Classification
Health Promotion (Level 2)	Provide emergency care and develop health promotion services.	Survey - Students	Student self-assessment of ability-based outcomes conducted in the professional year 2 practice skills lab on: (Target Disease Prevention Programs) Design a prevention or detection program in a target population.	P-2	2/5/2010	67.9% of student accelerators in Fall, 2009 strongly agree or agree that they demonstrate this competency.	Criterion Met
Patient-Specific and Population-based Disease Management (Level 2)	Analyze patient information in order to provide patient-specific and population-based disease management.	Survey - Students	Student self-assessment of ability-based outcomes conducted in the professional year 2 practice skills lab on: (Documenting Care) Explain methods of documenting patient-specific and/or population-based disease management activities.	P-2	2/5/2010	58.6% of student accelerators in Fall, 2009 strongly agree or agree that they demonstrate this competency. (Documenting Care)	Criterion Not Met
Patient-Specific and Population-based Disease Management (Level 2)	Analyze patient information in order to provide patient-specific and population-based disease management.	Survey - Students	Student self-assessment of ability-based outcomes conducted in the professional year 2 practice skills lab on: (Medicinal Chemistry) Relate the relevant medicinal chemistry to a patient-specific and/or population-based disease management plan.	P-2	2/5/2010	62.3% of student accelerators in Fall, 2009 strongly agree or agree that they demonstrate this competency. (Medicinal Chemistry)	Criterion Not Met
Systems Management (Level 2, Part 1)	Identify and analyze characteristics associated with purchasing, preparing, dispensing, distributing and administering medications and maintaining adequate inventory control.	Survey - Students	Student self-assessment of ability-based outcomes conducted in the professional year 2 practice skills lab on: (Indigent Patient Care Programs) List the patient-specific parameters that would be important in determining eligibility and need for indigent patient care programs.	P-2	2/5/2010	60.4% of student accelerators in Fall, 2009 strongly agree or agree that they demonstrate this competency. (Indigent Patient Care Programs)	Criterion Not Met
Communication (Level 2)	Demonstrate improvement in basic communication skills and exhibit creativity in communication situations through the use of reading, listening, writing, speaking, and use of data, media, and computers.	Survey - Students	Student self-assessment of ability-based outcomes conducted in the professional year 2 practice skills lab on: (Interdisciplinary Communication) Establish collaborative relationships with other healthcare professionals that foster a team.	P-2	5/27/2010	82.2% of P-2 regular paced students in Spring, 2010 strongly agree or agree that they demonstrate this competency (Interdisciplinary Communication)	Criterion Met
Communication (Level 2)	Demonstrate improvement in basic communication skills and exhibit creativity in communication situations through the use of reading, listening, writing, speaking, and use of data, media, and computers.	Survey - Students	Student self-assessment of ability-based outcomes conducted in the professional year 2 practice skills lab on: (Health Information) Effectively communicate drug and health information at appropriate levels for patients and healthcare professionals.	P-2	5/27/2010	85.6% of P-2 regular paced students in Spring, 2010 strongly agree or agree that they demonstrate this competency (Health Information)	Criterion Met
Communication (Level 3)	Communicate clearly, accurately, compassionately, confidently, effectively and persuasively using a variety of methods (i.e. reading, listening, writing, speaking, and the use of data, media, and computer skills) and with a variety of target audiences.	Survey - Students	Student self-assessment of ability-based outcomes conducted in the professional year 2 practice skills lab on: (Assessing the Audience) Assess the target audience to ensure the correct message was received.	P-2	5/27/2010	94.6% of P-2 regular paced students in Spring, 2010 strongly agree or agree that they demonstrate this competency (Assessing the Audience)	Criterion Met
Communication (Level 3)	Communicate clearly, accurately, compassionately, confidently, effectively and persuasively using a variety of methods (i.e. reading, listening, writing, speaking, and the use of data, media, and computer skills) and with a variety of target audiences.	Survey - Students	Student self-assessment of ability-based outcomes conducted in the professional year 2 practice skills lab on: (Targeted Audiences) Construct messages appropriate to the target audience to deliver information clearly and in a manner in which the message is heard.	P-2	5/27/2010	80.9% of P-2 regular paced students in Spring, 2010 strongly agree or agree that they demonstrate this competency (Targeted Audience)	Criterion Met
Health Promotion (Level 2)	Provide emergency care and develop health promotion services.	Survey - Students	Student self-assessment of ability-based outcomes conducted in the professional year 2 practice skills lab on: (Target Disease Prevention Programs) Design a prevention or detection program in a target population.	P-2	5/27/2010	60% of P-2 regular paced students in Spring, 2010 strongly agree or agree that they demonstrate this competency (Target Disease Prevention Program)	Criterion Not Met



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STUDENT ASSESSMENT OF ABILITY-BASED OUTCOMES P-1, P-2, P-3 (2009-2010)

Outcome Name	Outcome	Assessment Method Category	Assessment Method	Professional Year	Result Date	Result	Classification
Patient-Specific and Population-based Disease Management (Level 1)	Gather, organize and evaluate information in order to provide patient-specific and population-based disease management.	Survey - Students	Student self-assessment of ability-based outcomes conducted in the professional year 2 practice skills lab on: (Home Diagnostics) Explain the use of devices and other means for detecting and/or monitoring diseases.	P-2	5/27/2010	76.6% of P-2 regular paced students in Spring, 2010 strongly agree or agree that they demonstrate this competency (Home Diagnostics)	Criterion Met
Patient-Specific and Population-based Disease Management (Level 1)	Gather, organize and evaluate information in order to provide patient-specific and population-based disease management.	Survey - Students	Student self-assessment of ability-based outcomes conducted in the professional year 2 practice skills lab on: (Medicinal Chemistry) Describe the medicinal chemistry of prescription, non-prescription and dietary supplements used in the patient-specific and/or population-based disease management plan.	P-2	5/27/2010	63.3% of P-2 regular paced students in Spring, 2010 strongly agree or agree that they demonstrate this competency (Medicinal Chemistry)	Criterion Not Met
Patient-Specific and Population-based Disease Management (Level 1)	Gather, organize and evaluate information in order to provide patient-specific and population-based disease management.	Survey - Students	Student self-assessment of ability-based outcomes conducted in the professional year 2 practice skills lab on: (Pharmacology) Describe the pharmacology of prescription, non-prescription and dietary supplements used in the patient-specific and/or population-based disease management plan.	P-2	5/27/2010	88.8% of P-2 regular paced students in Spring, 2010 strongly agree or agree that they demonstrate this competency (Pharmacology)	Criterion Met
Patient-Specific and Population-based Disease Management (Level 1)	Gather, organize and evaluate information in order to provide patient-specific and population-based disease management.	Survey - Students	Student self-assessment of ability-based outcomes conducted in the professional year 2 practice skills lab on: (Physical Assessment) Explain the components of physical assessment.	P-2	5/27/2010	68.9% of P-2 regular paced students in Spring, 2010 strongly agree or agree that they demonstrate this competency (Physical Assessment)	Criterion Met
Patient-Specific and Population-based Disease Management (Level 1)	Gather, organize and evaluate information in order to provide patient-specific and population-based disease management.	Survey - Students	Student self-assessment of ability-based outcomes conducted in the professional year 2 practice skills lab on: (Special Populations) Describe pathophysiologic and pharmacotherapy alterations specific for special population patients (e.g., pediatric, geriatric, pregnant, cystic fibrosis, sickle cell anemia, cardiac disease, genetic disorders, and others).	P-2	5/27/2010	64.6% of P-2 regular paced students in Spring, 2010 strongly agree or agree that they demonstrate this competency (Special Populations)	Criterion Not Met
Patient-Specific and Population-based Disease Management (Level 2)	Analyze patient information in order to provide patient-specific and population-based disease management.	Survey - Students	Student self-assessment of ability-based outcomes conducted in the professional year 2 practice skills lab on: (Documenting Care) Explain methods of documenting patient-specific and/or population-based disease management activities.	P-2	5/27/2010	74.5% of P-2 regular paced students in Spring, 2010 strongly agree or agree that they demonstrate this competency (Documenting Care)	Criterion Met
Patient-Specific and Population-based Disease Management (Level 2)	Analyze patient information in order to provide patient-specific and population-based disease management.	Survey - Students	Student self-assessment of ability-based outcomes conducted in the professional year 2 practice skills lab on: (Medicinal Chemistry) Relate the relevant medicinal chemistry to a patient-specific and/or population-based disease management plan.	P-2	5/27/2010	60% of P-2 regular paced students in Spring, 2010 strongly agree or agree that they demonstrate this competency (Medicinal Chemistry)	Criterion Not Met
Patient-Specific and Population-based Disease Management (Level 2)	Analyze patient information in order to provide patient-specific and population-based disease management.	Survey - Students	Student self-assessment of ability-based outcomes conducted in the professional year 2 practice skills lab on: (Pharmacokinetic Dosing) Calculate dosage regimens using pharmacokinetic principles.	P-2	5/27/2010	85.5% of P-2 regular paced students in Spring, 2010 strongly agree or agree that they demonstrate this competency (Pharmacokinetic Dosing)	Criterion Met
Patient-Specific and Population-based Disease Management (Level 2)	Analyze patient information in order to provide patient-specific and population-based disease management.	Survey - Students	Student self-assessment of ability-based outcomes conducted in the professional year 2 practice skills lab on: (Pharmacokinetics) Relate relevant pharmacokinetics to a patient-specific and/or population-based disease management plan.	P-2	5/27/2010	82.2% of P-2 regular paced students in Spring, 2010 strongly agree or agree that they demonstrate this competency (Pharmacokinetics)	Criterion Met

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STUDENT ASSESSMENT OF ABILITY-BASED OUTCOMES P-1, P-2, P-3 (2009-2010)

Outcome Name	Outcome	Assessment Method Category	Assessment Method	Professional Year	Result Date	Result	Classification
Patient-Specific and Population-based Disease Management (Level 2)	Analyze patient information in order to provide patient-specific and population-based disease management.	Survey - Students	Student self-assessment of ability-based outcomes conducted in the professional year 2 practice skills lab on: (Pharmacology) Relate relevant pharmacology to a patient-specific and/or population-based disease management plan.	P-2	5/27/2010	86.6% of P-2 regular paced students in Spring, 2010 strongly agree or agree that they demonstrate this competency (Pharmacology)	Criterion Met
Patient-Specific and Population-based Disease Management (Level 2)	Analyze patient information in order to provide patient-specific and population-based disease management.	Survey - Students	Student self-assessment of ability-based outcomes conducted in the professional year 2 practice skills lab on: (Special Populations) Relate alterations specific for special population patients to dosage calculation and adjustments, and drug monitoring in special-population patients.	P-2	5/27/2010	81.1% of P-2 regular paced students in Spring, 2010 strongly agree or agree that they demonstrate this competency	Criterion Met
Patient-Specific and Population-based Disease Management (Level 2)	Analyze patient information in order to provide patient-specific and population-based disease management.	Survey - Students	Student self-assessment of ability-based outcomes conducted in the professional year 2 practice skills lab on: (Using Online Resources) Exhibit the ability to utilize appropriate online information resources.	P-2	5/27/2010	95.6% of P-2 regular paced students in Spring, 2010 strongly agree or agree that they demonstrate this competency (Online Resources)	Criterion Met
Systems Management (Level 1, Part 1)	Specify elements necessary for purchasing, preparing, dispensing, distributing and administering medications and maintaining adequate inventory control.	Survey - Students	Student self-assessment of ability-based outcomes conducted in the professional year 2 practice skills lab on: (Quality Control) Describe the storage, packaging and quality control tests performed to assure that the dosage form meets USP requirements.	P-2	5/27/2010	70% of P-2 regular paced students in Spring, 2010 strongly agree or agree that they demonstrate this competency (Quality Control)	Criterion Met
Systems Management (Level 1, Part 2)	State the components necessary to manage DIFFERENT TYPES OF pharmacy operations with consideration of management principles, law and ethics.	Survey - Students	Student self-assessment of ability-based outcomes conducted in the professional year 2 practice skills lab on: (Marketing) Describe different marketing principles that apply to pharmacy operations.	P-2	5/27/2010	88.9% of P-2 regular paced students in Spring, 2010 strongly agree or agree that they demonstrate this competency (Marketing)	Criterion Met
Systems Management (Level 2, Part 1)	Identify and analyze characteristics associated with purchasing, preparing, dispensing, distributing and administering medications and maintaining adequate inventory control.	Survey - Students	Student self-assessment of ability-based outcomes conducted in the professional year 2 practice skills lab on: (Continuity of Care) List the obstacles that a patient might encounter when transitioning their prescriptions between different care settings (e.g. community pharmacy to hospital; hospital to nursing home; nursing home to community pharmacy; etc.).	P-2	5/27/2010	94.1% of P-2 regular paced students in Spring, 2010 strongly agree or agree that they demonstrate this competency (Continuity of Care)	Criterion Met
Systems Management (Level 2, Part 1)	Identify and analyze characteristics associated with purchasing, preparing, dispensing, distributing and administering medications and maintaining adequate inventory control.	Survey - Students	Student self-assessment of ability-based outcomes conducted in the professional year 2 practice skills lab on: (Managing Safe Medication Systems) List the things that might cause medication errors in a contemporary dispensing pharmacy, and how they might be managed to improve patient care.	P-2	5/27/2010	93.3% of P-2 regular paced students in Spring, 2010 strongly agree or agree that they demonstrate this competency (Managing Safe Medication Systems)	Criterion Met
Systems Management (Level 2, Part 1)	Identify and analyze characteristics associated with purchasing, preparing, dispensing, distributing and administering medications and maintaining adequate inventory control.	Survey - Students	Student self-assessment of ability-based outcomes conducted in the professional year 2 practice skills lab on: (Medication Use System Safety) Identify the medication use system specific characteristics that are susceptible to flaws in prescribing, dispensing and use.	P-2	5/27/2010	90% of P-2 regular paced students in Spring, 2010 strongly agree or agree that they demonstrate this competency (Medication Use System Safety)	Criterion Met
Systems Management (Level 2, Part 1)	Identify and analyze characteristics associated with purchasing, preparing, dispensing, distributing and administering medications and maintaining adequate inventory control.	Survey - Students	Student self-assessment of ability-based outcomes conducted in the professional year 2 practice skills lab on: (Prescription Benefit Management) Describe the role and function of prescription benefit plans including relevant federal (e.g. Medicare, Medicaid) and state plans.	P-2	5/27/2010	74.4% of P-2 regular paced students in Spring, 2010 strongly agree or agree that they demonstrate this competency (Prescription Benefit Management)	Criterion Met

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Outcome Name	Outcome	Assessment Method Category	Assessment Method	Professional Year	Result Date	Result	Classification
Patient-Specific and Population-based Disease Management (Level 2)	Analyze patient information in order to provide patient-specific and population-based disease management.	Survey - Students	Student self-assessment of ability-based outcomes conducted in the professional year 2 practice skills lab on: (Special Populations) Relate alterations specific for special population patients to dosage calculation and adjustments, and drug monitoring in special-population patients.	P-2	2/5/2010	79.2% of student accelerators in Fall, 2009 strongly agree or agree that they demonstrate this competency. (Special Populations)	Criterion Met
Patient-Specific and Population-based Disease Management (Level 2)	Analyze patient information in order to provide patient-specific and population-based disease management.	Survey - Students	Student self-assessment of ability-based outcomes conducted in the professional year 2 practice skills lab on: (Using Online Resources) Exhibit the ability to utilize appropriate online information resources.	P-2	2/5/2010	100% of student accelerators in Fall, 2009 strongly agree or agree that they demonstrate this competency. (Using Online Resources)	Criterion Met
Systems Management (Level 1, Part 1)	Specify elements necessary for purchasing, preparing, dispensing, distributing and administering medications and maintaining adequate inventory control.	Survey - Students	Student self-assessment of ability-based outcomes conducted in the professional year 2 practice skills lab on: (Quality Control) Describe the storage, packaging and quality control tests performed to assure that the dosage form meets USP requirements.	P-2	2/5/2010	81.1% of student accelerators in Fall, 2009 strongly agree or agree that they demonstrate this competency. (Quality Control)	Criterion Met
Systems Management (Level 1, Part 2)	State the components necessary to manage DIFFERENT TYPES OF pharmacy operations with consideration of management principles, law and ethics.	Survey - Students	Student self-assessment of ability-based outcomes conducted in the professional year 2 practice skills lab on: (Marketing) Describe different marketing principles that apply to pharmacy operations.	P-2	2/5/2010	67.9% of student accelerators in Fall, 2009 strongly agree or agree that they demonstrate this competency. (Marketing)	Criterion Met
Systems Management (Level 2, Part 1)	Identify and analyze characteristics associated with purchasing, preparing, dispensing, distributing and administering medications and maintaining adequate inventory control.	Survey - Students	Student self-assessment of ability-based outcomes conducted in the professional year 2 practice skills lab on: (Continuity of Care) List the obstacles that a patient might encounter when transitioning their prescriptions between different care settings (e.g. community pharmacy to hospital; hospital to nursing home; nursing home to community pharmacy, etc.).	P-2	2/5/2010	69.8% of student accelerators in Fall, 2009 strongly agree or agree that they demonstrate this competency. (Continuity of Care)	Criterion Met
Systems Management (Level 2, Part 1)	Identify and analyze characteristics associated with purchasing, preparing, dispensing, distributing and administering medications and maintaining adequate inventory control.	Survey - Students	Student self-assessment of ability-based outcomes conducted in the professional year 2 practice skills lab on: (Managing Safe Medication Systems) List the things that might cause medication errors in a contemporary dispensing pharmacy, and how they might be managed to improve patient care.	P-2	2/5/2010	96.2% of student accelerators in Fall, 2009 strongly agree or agree that they demonstrate this competency. (Managing Safe Medication Use)	Criterion Met
Systems Management (Level 2, Part 1)	Identify and analyze characteristics associated with purchasing, preparing, dispensing, distributing and administering medications and maintaining adequate inventory control.	Survey - Students	Student self-assessment of ability-based outcomes conducted in the professional year 2 practice skills lab on: (Medication Use System Safety) Identify the medication use system specific characteristics that are susceptible to flaws in prescribing, dispensing and use.	P-2	2/5/2010	92.5% of student accelerators in Fall, 2009 strongly agree or agree that they demonstrate this competency. (Medication Use Safety)	Criterion Met
Systems Management (Level 2, Part 1)	Identify and analyze characteristics associated with purchasing, preparing, dispensing, distributing and administering medications and maintaining adequate inventory control.	Survey - Students	Student self-assessment of ability-based outcomes conducted in the professional year 2 practice skills lab on: (Prescription Benefit Management) Describe the role and function of prescription benefit plans including relevant federal (e.g. Medicare, Medicaid) and state plans.	P-2	2/5/2010	77.4% of student accelerators in Fall, 2009 strongly agree or agree that they demonstrate this competency. (Prescription Benefit Management)	Criterion Met
Systems Management (Level 2, Part 1)	Identify and analyze characteristics associated with purchasing, preparing, dispensing, distributing and administering medications and maintaining adequate inventory control.	Survey - Students	Student self-assessment of ability-based outcomes conducted in the professional year 2 practice skills lab on: (Selecting Automation) List the important characteristics, which must be considered when evaluating, selecting and implementing automated technology.	P-2	2/5/2010	94.3% of student accelerators in Fall, 2009 strongly agree or agree that they demonstrate this competency. (Selecting Automation)	Criterion Met

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STUDENT ASSESSMENT OF ABILITY-BASED OUTCOMES P-1, P-2, P-3 (2009-2010)

Outcome Name	Outcome	Assessment Method Category	Assessment Method	Professional Year	Result Date	Result	Classification
Systems Management (Level 3, Part 1)	Apply information regarding purchasing, preparing, dispensing, distributing and administering medications and purchasing other supplies to optimize pharmaceutical care.	Survey - Students	Student self-assessment of ability-based outcomes conducted in the professional year 2 practice skills lab on: (Negligence) Identify the role of negligence law in professional malpractice; and interpret all relevant Michigan case law that is relevant to shaping the common law duties of a pharmacist.	P-2	5/27/2010	82.2% of P-2 regular paced students in Spring, 2010 strongly agree or agree that they demonstrate this competency (Negligence)	Criterion Met
Communication (Level 3)	Communicate clearly, accurately, compassionately, confidently, effectively and persuasively using a variety of methods (i.e. reading, listening, writing, speaking, and the use of data, media, and computer skills) and with a variety of target audiences.	Survey - Students	Student self-assessment of ability-based outcomes conducted in the professional year 2 practice skills lab on: (Conflict Resolution) Use conflict resolution when managing human resources.	P-2	5/27/2010	81.1% of P-2 regular paced students in Spring, 2010 strongly agree or agree that they demonstrate this competency (Conflict Resolution)	Criterion Met
Patient-Specific and Population-based Disease Management (Level 1)	Gather, organize and evaluate information in order to provide patient-specific and population-based disease management.	Survey - Students	Student self-assessment of ability-based outcomes conducted in the professional year 2 practice skills lab on: (Pharmacokinetics) Describe the pharmacokinetics of some of the fundamental agents associated with prescription, non-prescription and dietary supplements used in the patient-specific and/or population-based disease management plan.	P-2	5/27/2010	84.4% of P-2 regular paced students in Spring, 2010 strongly agree or agree that they demonstrate this competency (Pharmacokinetics)	Criterion Met
Systems Management (Level 2, Part 1)	Identify and analyze characteristics associated with purchasing, preparing, dispensing, distributing and administering medications and maintaining adequate inventory control.	Survey - Students	Student self-assessment of ability-based outcomes conducted in the professional year 2 practice skills lab on: (Indigent Patient Care Programs) List the patient-specific parameters that would be important in determining eligibility and need for indigent patient care programs.	P-2	5/27/2010	63.4% of P-2 regular paced students in Spring, 2010 strongly agree or agree that they demonstrate this competency (Indigent Patient Care Programs)	Criterion Not Met
Communication (Level 2)	Demonstrate improvement in basic communication skills and exhibit creativity in communication situations through the use of reading, listening, writing, speaking, and use of data, media, and computers.	Survey - Students	Student self-assessment of ability-based outcomes conducted in the professional year 3 practice skills lab on: (Conflict Resolution) Given a specific situation describe the best mechanism for conflict resolution.	P-3	5/10/2010	68.7% of P-3 students (Spring, 2010) strongly agree or agree that they demonstrate this competency: (Conflict Resolution)	Criterion Met
Communication (Level 3)	Communicate clearly, accurately, compassionately, confidently, effectively and persuasively using a variety of methods (i.e. reading, listening, writing, speaking, and the use of data, media, and computer skills) and with a variety of target audiences.	Survey - Students	Student self-assessment of ability-based outcomes conducted in the professional year 3 practice skills lab on: (Adapting) Adapt communication methods to the situation and appropriate member of the health care team to engender a team approach to patient care.	P-3	5/10/2010	91.7% of P-3 students (Spring, 2010) strongly agree or agree that they demonstrate this competency: (Adapting Message)	Criterion Met
Communication (Level 3)	Communicate clearly, accurately, compassionately, confidently, effectively and persuasively using a variety of methods (i.e. reading, listening, writing, speaking, and the use of data, media, and computer skills) and with a variety of target audiences.	Survey - Students	Student self-assessment of ability-based outcomes conducted in the professional year 3 practice skills lab on: (Counseling Patients on Devices) Educate and/or counsel patients, caregivers or other health care providers about the proper use of medical goods and devices to ensure effective use.	P-3	5/10/2010	87.8% of P-3 students (Spring, 2010) strongly agree or agree that they demonstrate this competency: (Counseling Patients on Devices)	Criterion Met
Communication (Level 3)	Communicate clearly, accurately, compassionately, confidently, effectively and persuasively using a variety of methods (i.e. reading, listening, writing, speaking, and the use of data, media, and computer skills) and with a variety of target audiences.	Survey - Students	Student self-assessment of ability-based outcomes conducted in the professional year 3 practice skills lab on: (Counseling Patients on Medications) Educate and/or counsel patients, caregivers or other health care providers about drug therapy.	P-3	5/10/2010	90% of P-3 students (Spring, 2010) strongly agree or agree that they demonstrate this competency: (Counseling Patients on Medications)	Criterion Met

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STUDENT ASSESSMENT OF ABILITY-BASED OUTCOMES P-1, P-2, P-3 (2009-2010)

Outcome Name	Outcome	Assessment Method Category	Assessment Method	Professional Year	Result Date	Result	Classification
Communication (Level 3)	Communicate clearly, accurately, compassionately, confidently, effectively and persuasively using a variety of methods (i.e. reading, listening, writing, speaking, and the use of data, media, and computer skills) and with a variety of target audiences.	Survey - Students	Student self-assessment of ability-based outcomes conducted in the professional year 3 practice skills lab on: (Ideas, Thoughts and Feelings) Interpret ideas, thoughts and feelings communicated through reading, listening, data, media, and computers with sensitivity to the cultural background of the sender.	P-3	5/10/2010	82.7% of P-3 students (Spring, 2010) strongly agree or agree that they demonstrate this competency: (Interpreting Ideas, Thoughts and Feelings)	Criterion Met
Communication (Level 3)	Communicate clearly, accurately, compassionately, confidently, effectively and persuasively using a variety of methods (i.e. reading, listening, writing, speaking, and the use of data, media, and computer skills) and with a variety of target audiences.	Survey - Students	Student self-assessment of ability-based outcomes conducted in the professional year 3 practice skills lab on: (Methods and Cultural Sensitivity) Choose communication methods that are sensitive to the cultural background of the target audience.	P-3	5/10/2010	76.2% of P-3 students (Spring, 2010) strongly agree or agree that they demonstrate this competency: (Methods and Cultural Sensitivity)	Criterion Met
Communication (Level 3)	Communicate clearly, accurately, compassionately, confidently, effectively and persuasively using a variety of methods (i.e. reading, listening, writing, speaking, and the use of data, media, and computer skills) and with a variety of target audiences.	Survey - Students	Student self-assessment of ability-based outcomes conducted in the professional year 3 practice skills lab on: (Responding to Clinical Questions) Respond appropriately, and in the correct format (written or verbal) to questions posed.	P-3	5/10/2010	82.9% of P-3 students (Spring, 2010) strongly agree or agree that they demonstrate this competency: (Responding to Clinical Questions)	Criterion Met
Communication (Level 3)	Communicate clearly, accurately, compassionately, confidently, effectively and persuasively using a variety of methods (i.e. reading, listening, writing, speaking, and the use of data, media, and computer skills) and with a variety of target audiences.	Survey - Students	Student self-assessment of ability-based outcomes conducted in the professional year 3 practice skills lab on: (Using Media Effectively) Write, read, listen, speak and use data, media and computers during communications effectively in a variety of contexts.	P-3	5/10/2010	89.6% of P-3 students (Spring, 2010) strongly agree or agree that they demonstrate this competency: (Using Media Effectively)	Criterion Met
Health Promotion (Level 1)	Describe the basic elements of emergency care and health promotion.	Survey - Students	Student self-assessment of ability-based outcomes conducted in the professional year 3 practice skills lab on: (ACLS) Identify various therapeutic alternative, both pharmacologic and non pharmacologic, which can be used to treat emergency situations.	P-3	5/10/2010	69.6% of P-3 students (Spring, 2010) strongly agree or agree that they demonstrate this competency: (ACLS)	Criterion Met
Health Promotion (Level 1)	Describe the basic elements of emergency care and health promotion.	Survey - Students	Student self-assessment of ability-based outcomes conducted in the professional year 3 practice skills lab on: (Disaster Planning) Describe the use of drugs in disaster planning.	P-3	5/10/2010	66.6% of P-3 students (Spring, 2010) strongly agree or agree that they demonstrate this competency: (Disaster Planning)	Criterion Met
Health Promotion (Level 1)	Describe the basic elements of emergency care and health promotion.	Survey - Students	Student self-assessment of ability-based outcomes conducted in the professional year 3 practice skills lab on: (Social and Ethical Issues) Describe social, professional, ethical and legal issues involved in the delivery of emergency care and health promotion.	P-3	5/10/2010	76.6% of P-3 students (Spring, 2010) strongly agree or agree that they demonstrate this competency: (Social and Ethical Issues)	Criterion Met
Health Promotion (Level 2)	Provide emergency care and develop health promotion services.	Survey - Students	Student self-assessment of ability-based outcomes conducted in the professional year 3 practice skills lab on: (Advanced Life Support) Demonstrate the ability to provide emergency care (i.e. first aid, BLS, ACLS, poison control intervention).	P-3	5/10/2010	75% of P-3 students (Spring, 2010) strongly agree or agree that they demonstrate this competency: (Advanced Life Support)	Criterion Met
Health Promotion (Level 2)	Provide emergency care and develop health promotion services.	Survey - Students	Student self-assessment of ability-based outcomes conducted in the professional year 3 practice skills lab on: (Evaluating Primary Literature) Evaluate the results of primary literature studies within the context of an individual or population related to emergency care or health promotion.	P-3	5/10/2010	73.9% of P-3 students (Spring, 2010) strongly agree or agree that they demonstrate this competency: (Evaluating Primary Literature)	Criterion Met

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Outcome Name	Outcome	Assessment Method Category	Assessment Method	Professional Year	Result Date	Result	Classification
Health Promotion (Level 3)	Provide health promotion services in accordance with social, professional, ethical, and legal guidelines.)	Survey - Students	Student self-assessment of ability-based outcomes conducted in the professional year 3 practice skills lab on: (Disease Prevention Awareness Programs) Perform services designed to screen, prevent, and/or detect various disease or pathologic conditions collaboratively with others.	P-3	5/10/2010	84.3% of P-3 students (Spring, 2010) strongly agree or agree that they demonstrate his competency: (Disease Prevention Awareness Programs)	Criterion Met
Health Promotion (Level 3)	Provide health promotion services in accordance with social, professional, ethical, and legal guidelines.)	Survey - Students	Student self-assessment of ability-based outcomes conducted in the professional year 3 practice skills lab on: (Patient Triage) Provide appropriate triage of patient problems, based on signs, symptoms and a patient history that requires referral to another health care provider.	P-3	5/10/2010	87.9% of P-3 students (Spring, 2010) strongly agree or agree that they demonstrate his competency: (Patient Triage)	Criterion Met
Health Promotion (Level 3)	Provide health promotion services in accordance with social, professional, ethical, and legal guidelines.)	Survey - Students	Student self-assessment of ability-based outcomes conducted in the professional year 3 practice skills lab on: (Substance Abuse Referral) Provide appropriate and professional referral for potential or actual substance abuse in patients and colleagues.	P-3	5/10/2010	85.9% of P-3 students (Spring, 2010) strongly agree or agree that they demonstrate his competency: (Substance Abuse Referral)	Criterion Met
Patient-Specific and Population-based Disease Management (Level 1)	Gather, organize and evaluate information in order to provide patient-specific and population-based disease management.	Survey - Students	Student self-assessment of ability-based outcomes conducted in the professional year 3 practice skills lab on: (Drug Information) Describe the nature, classification and specific aspects of a drug information request.	P-3	5/10/2010	77% of P-3 students (Spring, 2010) strongly agree or agree that they demonstrate his competency: (Drug Information)	Criterion Met
Patient-Specific and Population-based Disease Management (Level 1)	Gather, organize and evaluate information in order to provide patient-specific and population-based disease management.	Survey - Students	Student self-assessment of ability-based outcomes conducted in the professional year 3 practice skills lab on: (Literature Retrieval) Retrieve professional, lay and scientific literature and identify appropriate media to 1) communicate drug information effectively to patients, their families and other involved health care providers and 2) make evidence-based therapeutic decisions.	P-3	5/10/2010	86.3% of P-3 students (Spring, 2010) strongly agree or agree that they demonstrate his competency: (Literature Retrieval)	Criterion Met
Patient-Specific and Population-based Disease Management (Level 1)	Gather, organize and evaluate information in order to provide patient-specific and population-based disease management.	Survey - Students	Student self-assessment of ability-based outcomes conducted in the professional year 3 practice skills lab on: (Pharmacoeconomics) Assess pharmacoeconomic data to select the dosage form, amount, and manufacturer of a drug product.	P-3	5/10/2010	69.5% of P-3 students (Spring, 2010) strongly agree or agree that they demonstrate his competency: (Pharmacoeconomics)	Criterion Met
Patient-Specific and Population-based Disease Management (Level 1)	Gather, organize and evaluate information in order to provide patient-specific and population-based disease management.	Survey - Students	Student self-assessment of ability-based outcomes conducted in the professional year 3 practice skills lab on: (References) Identify the common drug and disease oriented pharmacy references and distinguish between primary, secondary, and tertiary literature.	P-3	5/10/2010	85.3% of P-3 students (Spring, 2010) strongly agree or agree that they demonstrate his competency: (References)	Criterion Met
Patient-Specific and Population-based Disease Management (Level 2)	Analyze patient information in order to provide patient-specific and population-based disease management.	Survey - Students	Student self-assessment of ability-based outcomes conducted in the professional year 3 practice skills lab on: (Disease State Management) Establish goals and desired outcomes for the patient-specific and/or population-based disease management plan.	P-3	5/10/2010	93.3% of P-3 students (Spring, 2010) strongly agree or agree that they demonstrate his competency: (Disease State Management)	Criterion Met
Patient-Specific and Population-based Disease Management (Level 2)	Analyze patient information in order to provide patient-specific and population-based disease management.	Survey - Students	Student self-assessment of ability-based outcomes conducted in the professional year 3 practice skills lab on: (DRPs and Medication Errors) Identify drug-related problems and medical errors.	P-3	5/10/2010	92.7% of P-3 students (Spring, 2010) strongly agree or agree that they demonstrate his competency: (DRPs and Medication Errors)	Criterion Met

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Outcome Name	Outcome	Assessment Method Category	Assessment Method	Professional Year	Result Date	Result	Classification
Patient-Specific and Population-based Disease Management (Level 2)	Analyze patient information in order to provide patient-specific and population-based disease management.	Survey - Students	Student self-assessment of ability-based outcomes conducted in the professional year 3 practice skills lab on: (Drug Delivery Forms) Select the most appropriate drug delivery dosage form/device for the patient based on pharmacotherapy, age, disease, bioequivalence, route of administration, stability, incompatibility, and cost.	P-3	5/10/2010	88.7% of P-3 students (Spring, 2010) strongly agree or agree that they demonstrate this competency: (Drug Delivery Forms)	Criterion Met
Patient-Specific and Population-based Disease Management (Level 2)	Analyze patient information in order to provide patient-specific and population-based disease management.	Survey - Students	Student self-assessment of ability-based outcomes conducted in the professional year 3 practice skills lab on: (Drug Information) Determine the appropriate information to evaluate to respond to drug information requests.	P-3	5/10/2010	84.5% of P-3 students (Spring, 2010) strongly agree or agree that they demonstrate this competency: (Drug Information)	Criterion Met
Patient-Specific and Population-based Disease Management (Level 2)	Analyze patient information in order to provide patient-specific and population-based disease management.	Survey - Students	Student self-assessment of ability-based outcomes conducted in the professional year 3 practice skills lab on: (Evaluating Professional Literature) Analyze professional, lay and scientific literature and identify appropriate media to 1) communicate drug information effectively to patients, their families, and other involved health care providers, and 2) make evidence-based therapeutic decisions.	P-3	5/10/2010	81.5% of P-3 students (Spring, 2010) strongly agree or agree that they demonstrate this competency: (Evaluating Professional Literature)	Criterion Met
Patient-Specific and Population-based Disease Management (Level 2)	Analyze patient information in order to provide patient-specific and population-based disease management.	Survey - Students	Student self-assessment of ability-based outcomes conducted in the professional year 3 practice skills lab on: (Evidence-Based Medicine) Interpret and prioritize data/evidence needed to formulate and implement a patient-specific and/or population-based disease management plan to achieve desired outcomes.	P-3	5/10/2010	81% of P-3 students (Spring, 2010) strongly agree or agree that they demonstrate this competency: (Evidence-Based Medicine)	Criterion Met
Patient-Specific and Population-based Disease Management (Level 2)	Analyze patient information in order to provide patient-specific and population-based disease management.	Survey - Students	Student self-assessment of ability-based outcomes conducted in the professional year 3 practice skills lab on: (Home Diagnostics) Analyze information from devices and other means for detecting and/or monitoring diseases.	P-3	5/10/2010	89.2% of P-3 students (Spring, 2010) strongly agree or agree that they demonstrate this competency: (Home Diagnostics)	Criterion Met
Patient-Specific and Population-based Disease Management (Level 2)	Analyze patient information in order to provide patient-specific and population-based disease management.	Survey - Students	Student self-assessment of ability-based outcomes conducted in the professional year 3 practice skills lab on: (Interpreting Study Results) Discuss the application of study results to expanded patient populations.	P-3	5/10/2010	76% of P-3 students (Spring, 2010) strongly agree or agree that they demonstrate this competency: (Interpreting Study Results)	Criterion Met
Patient-Specific and Population-based Disease Management (Level 2)	Analyze patient information in order to provide patient-specific and population-based disease management.	Survey - Students	Student self-assessment of ability-based outcomes conducted in the professional year 3 practice skills lab on: (Physical Assessment) Perform basic physical assessment.	P-3	5/10/2010	70% of P-3 students (Spring, 2010) strongly agree or agree that they demonstrate this competency: (Physical Assessment)	Criterion Met
Patient-Specific and Population-based Disease Management (Level 2)	Analyze patient information in order to provide patient-specific and population-based disease management.	Survey - Students	Student self-assessment of ability-based outcomes conducted in the professional year 3 practice skills lab on: (Special Populations) Relate alterations that are specific to special populations to dosage calculation and adjustments, and drug monitoring in these groups.	P-3	5/10/2010	87% of P-3 students (Spring, 2010) strongly agree or agree that they demonstrate this competency: (Special Populations)	Criterion Met
Patient-Specific and Population-based Disease Management (Level 2)	Analyze patient information in order to provide patient-specific and population-based disease management.	Survey - Students	Student self-assessment of ability-based outcomes conducted in the professional year 3 practice skills lab on: (Therapy Goals) Develop a monitoring plan that evaluates achievement of pharmacotherapeutic goals.	P-3	5/10/2010	89.6% of P-3 students (Spring, 2010) strongly agree or agree that they demonstrate this competency: (Therapy Goals)	Criterion Met

FERRIS STATE UNIVERSITY COLLEGE OF PHARMACY  
STUDENT ASSESSMENT OF ABILITY-BASED OUTCOMES P-1, P-2, P-3 (2009-2010)

Outcome Name	Outcome	Assessment Method Category	Assessment Method	Professional Year	Result Date	Result	Classification
Patient-Specific and Population-based Disease Management (Level 3)	Implement, monitor, evaluate, adjust, document and communicate the patient-specific and/or population-based disease management plan.	Survey - Students	Student self-assessment of ability-based outcomes conducted in the professional year 3 practice skills lab on: (Biochemistry) apply principles of biochemistry to an individual patient's drug therapy plan and management.	P-3	5/10/2010	52% of P-3 students (Spring, 2010) strongly agree or agree that they demonstrate this competency: (Biochemistry)	Criterion Not Met
Patient-Specific and Population-based Disease Management (Level 3)	Implement, monitor, evaluate, adjust, document and communicate the patient-specific and/or population-based disease management plan.	Survey - Students	Student self-assessment of ability-based outcomes conducted in the professional year 3 practice skills lab on: (Compounding and Dispensing) Compound, prepare and dispense prescription products with consideration of patient specific parameters and medication safety.	P-3	5/10/2010	70.2% of P-3 students (Spring, 2010) strongly agree or agree that they demonstrate this competency: (Compounding and Dispensing)	Criterion Met
Patient-Specific and Population-based Disease Management (Level 3)	Implement, monitor, evaluate, adjust, document and communicate the patient-specific and/or population-based disease management plan.	Survey - Students	Student self-assessment of ability-based outcomes conducted in the professional year 3 practice skills lab on: (Devices and Home Diagnostics) Evaluate and apply information from devices and other means for detecting and/or monitoring diseases when implementing and monitoring the patient-specific and/or population-based disease management plan.	P-3	5/10/2010	89.6% of P-3 students (Spring, 2010) strongly agree or agree that they demonstrate this competency: (Devices and Home Diagnostics)	Criterion Met
Patient-Specific and Population-based Disease Management (Level 3)	Implement, monitor, evaluate, adjust, document and communicate the patient-specific and/or population-based disease management plan.	Survey - Students	Student self-assessment of ability-based outcomes conducted in the professional year 3 practice skills lab on: (Evaluating Professional Literature) Evaluate and interpret professional, lay and scientific literature and identify appropriate media to communicate drug information effectively to patients, their families and other involved health care providers and make evidence-based therapeutic decisions.	P-3	5/10/2010	90.4% of P-3 students (Spring, 2010) strongly agree or agree that they demonstrate this competency: (Evaluating Professional Literature)	Criterion Met
Patient-Specific and Population-based Disease Management (Level 3)	Implement, monitor, evaluate, adjust, document and communicate the patient-specific and/or population-based disease management plan.	Survey - Students	Student self-assessment of ability-based outcomes conducted in the professional year 3 practice skills lab on: (Medicinal Chemistry) Apply principles of medicinal chemistry to an individual patient's drug therapy plan and management.	P-3	5/10/2010	54.6% of P-3 students (Spring, 2010) strongly agree or agree that they demonstrate this competency: (Medicinal Chemistry)	Criterion Not Met
Patient-Specific and Population-based Disease Management (Level 3)	Implement, monitor, evaluate, adjust, document and communicate the patient-specific and/or population-based disease management plan.	Survey - Students	Student self-assessment of ability-based outcomes conducted in the professional year 3 practice skills lab on: (Patient Education) Provide pharmacologic and non-pharmacologic education with the appropriate content to patients or care givers.	P-3	5/10/2010	96.1% of P-3 students (Spring, 2010) strongly agree or agree that they demonstrate this competency: (Patient Education)	Criterion Met
Patient-Specific and Population-based Disease Management (Level 3)	Implement, monitor, evaluate, adjust, document and communicate the patient-specific and/or population-based disease management plan.	Survey - Students	Student self-assessment of ability-based outcomes conducted in the professional year 3 practice skills lab on: (Pharmaceutics) Apply principles of pharmaceutics to an individual patient's drug therapy plan and management.	P-3	5/10/2010	72.6% of P-3 students (Spring, 2010) strongly agree or agree that they demonstrate this competency: (Pharmaceutics)	Criterion Met
Patient-Specific and Population-based Disease Management (Level 3)	Implement, monitor, evaluate, adjust, document and communicate the patient-specific and/or population-based disease management plan.	Survey - Students	Student self-assessment of ability-based outcomes conducted in the professional year 3 practice skills lab on: (Pharmacology) Apply principles of pharmacology to an individual patient's drug therapy plan and management.	P-3	5/10/2010	91.2% of P-3 students (Spring, 2010) strongly agree or agree that they demonstrate this competency: (Pharmacology)	Criterion Met
Systems Management (Level 1, Part 1)	Specify elements necessary for purchasing, preparing, dispensing, distributing and administering medications and maintaining adequate inventory control.	Survey - Students	Student self-assessment of ability-based outcomes conducted in the professional year 2 practice skills lab on: (Informatics) Define Informatics and its role in the delivery of pharmacy services and health care, now and in the future.	P-3	5/10/2010	51.6% of P-3 students (Spring, 2010) strongly agree or agree that they demonstrate this competency: (Informatics)	Criterion Not Met



FERRIS STATE UNIVERSITY COLLEGE OF PHARMACY  
STUDENT ASSESSMENT OF ABILITY-BASED OUTCOMES P-1, P-2, P-3 (2009-2010)

Outcome Name	Outcome	Assessment Method Category	Assessment Method	Professional Year	Result Date	Result	Classification
Systems Management (Level 1, Part 2)	State the components necessary to manage DIFFERENT TYPES OF pharmacy operations with consideration of management principles, law and ethics.	Survey - Students	Student self-assessment of ability-based outcomes conducted in the professional year 3 practice skills lab on: (Administrative, Civil and Criminal Law) Outline the difference between administrative, civil and criminal law for the relevant states.	P-3	5/10/2010	80% of P-3 students (Spring, 2010) strongly agree or agree that they demonstrate this competency: (Admin, Civil and Criminal Law)	Criterion Met
Systems Management (Level 1, Part 2)	State the components necessary to manage DIFFERENT TYPES OF pharmacy operations with consideration of management principles, law and ethics.	Survey - Students	Student self-assessment of ability-based outcomes conducted in the professional year 3 practice skills lab on: (Contract Law) Describe the principles of business contract law.	P-3	5/10/2010	46.3% of P-3 students (Spring, 2010) strongly agree or agree that they demonstrate this competency: (Contract Law)	Criterion Not Met
Systems Management (Level 1, Part 2)	State the components necessary to manage DIFFERENT TYPES OF pharmacy operations with consideration of management principles, law and ethics.	Survey - Students	Student self-assessment of ability-based outcomes conducted in the professional year 3 practice skills lab on: (Laws) Describe the important laws enacted at the federal and state level that influence the use of prescription and non-prescription drugs and dietary supplements in the U.S.	P-3	5/10/2010	63.6% of P-3 students (Spring, 2010) strongly agree or agree that they demonstrate this competency: (Laws)	Criterion Met
Systems Management (Level 2, Part 2)	Demonstrate advanced skills in managing pharmacy operations, human resources, logistics fiscal management, law and ethics.	Survey - Students	Student self-assessment of ability-based outcomes conducted in the professional year 3 practice skills lab on: (Contract Law) Identify the relevant contract law that influences the different aspects of managing a pharmacy.	P-3	5/10/2010	55.9% of P-3 students (Spring, 2010) strongly agree or agree that they demonstrate this competency: (Contract Law)	Criterion Not Met
Systems Management (Level 2, Part 2)	Demonstrate advanced skills in managing pharmacy operations, human resources, logistics fiscal management, law and ethics.	Survey - Students	Student self-assessment of ability-based outcomes conducted in the professional year 3 practice skills lab on: (Law) Interpret basic federal and state rules and regulations that influence pharmacy practice (administrative, criminal, civil) related to prescription and nonprescription drugs.	P-3	5/10/2010	94.2% of P-3 students (Spring, 2010) strongly agree or agree that they demonstrate this competency: (Law)	Criterion Met
Systems Management (Level 2, Part 3)	Identify the elements of, and develop systems for the reporting of medication errors and ADR's, for the conduct of OUL's, and for the maintenance of a formulary system.	Survey - Students	Student self-assessment of ability-based outcomes conducted in the professional year 3 practice skills lab on: (Pharmacoeconomics) Describe the role of a formulary and the different pharmacoeconomic tools used in formulary and prescription benefit management.	P-3	5/10/2010	87.1% of P-3 students (Spring, 2010) strongly agree or agree that they demonstrate this competency: (Pharmacoeconomics)	Criterion Met
Systems Management (Level 3, Part 1)	Apply information regarding purchasing, preparing, dispensing, distributing and administering medications and purchasing other supplies to optimize pharmaceutical care.	Survey - Students	Student self-assessment of ability-based outcomes conducted in the professional year 3 practice skills lab on: (Indigent Care Programs) Identify the specific programs that a patient would access for indigent care programs given the necessary patient-specific parameters.	P-3	5/10/2010	66.6% of P-3 students (Spring, 2010) strongly agree or agree that they demonstrate this competency: (Indigent Care Programs)	Criterion Met
Systems Management (Level 3, Part 2)	Apply management principles to effectively manage a pharmacy operation, including resources, facilities, and equipment.	Survey - Students	Student self-assessment of ability-based outcomes conducted in the professional year 3 practice skills lab on: (Administrative, Civil and Criminal Law) Comply with relevant administrative, civil and criminal law related to the practice of pharmacy and be prepared to successfully complete the State of Michigan law exam.	P-3	5/10/2010	84.4% of P-3 students (Spring, 2010) strongly agree or agree that they demonstrate this competency: (Administrative, Civil and Criminal Law)	Criterion Met
Systems Management (Level 3, Part 2)	Apply management principles to effectively manage a pharmacy operation, including resources, facilities, and equipment.	Survey - Students	Student self-assessment of ability-based outcomes conducted in the professional year 3 practice skills lab on: (Contract Law) Employ fundamental contract law principles in managing different aspects of a pharmacy operation.	P-3	5/10/2010	69.7% of P-3 students (Spring, 2010) strongly agree or agree that they demonstrate this competency: (Contract Law)	Criterion Not Met

FERRIS STATE UNIVERSITY COLLEGE OF PHARMACY  
STUDENT ASSESSMENT OF ABILITY-BASED OUTCOMES P-1, P-2, P-3 (2009-2010)

Outcome Name	Outcome	Assessment Method Category	Assessment Method	Professional Year	Result Date	Result	Classification
Systems Management (Level 3, Part 3)	Actively participate in the management of medication use through the reporting of medication errors and ADR, conducting and presenting DUE, and preparing and delivering formulary recommendations.	Survey - Students	Student self-assessment of ability-based outcomes conducted in the professional year 3 practice skills lab on: (DUR) Conduct and evaluate the results of a drug utilization review.	P-3	5/10/2010	64.1% of P-3 students (Spring, 2010) strongly agree or agree that they demonstrate this competency: (DUR)	Criterion Not Met
Systems Management (Level 3, Part 3)	Actively participate in the management of medication use through the reporting of medication errors and ADR, conducting and presenting DUE, and preparing and delivering formulary recommendations.	Survey - Students	Student self-assessment of ability-based outcomes conducted in the professional year 3 practice skills lab on: (HRQOL and Patient Reported Outcomes) Interpret patient outcomes that are related to quality of life (e.g. occupational abilities, social abilities, mood functioning, general body pain, etc.) and how they are affected by a given disease state or affected by drug therapy.	P-3	5/10/2010	88.8% of P-3 students (Spring, 2010) strongly agree or agree that they demonstrate this competency: (HRQOL and PROs)	Criterion Met
Systems Management (Level 3, Part 3)	Actively participate in the management of medication use through the reporting of medication errors and ADR, conducting and presenting DUE, and preparing and delivering formulary recommendations.	Survey - Students	Student self-assessment of ability-based outcomes conducted in the professional year 3 practice skills lab on: (Pharmacoeconomics) Apply the appropriate pharmacoeconomic tool to the situation, as relevant to formulary and prescription benefit administration.	P-3	5/10/2010	84.6% of P-3 students (Spring, 2010) strongly agree or agree that they demonstrate this competency: (Pharmacoeconomics)	Criterion Met
Systems Management (Level 2, Part 3)	Identify the elements of, and develop systems for the reporting of medication errors and ADR's, for the conduct of DUE, and for the maintenance of a formulary system.	Survey - Students	Student self-assessment of ability-based outcomes conducted in the professional year 3 practice skills lab on: (HRQOL and Patient Reported Outcomes) Identify patient outcomes that are related to quality of life (e.g. occupational abilities, social abilities, mood functioning, general body pain, etc.) and how they are affected by a given disease state or affected by drug therapy.	P-3	5/10/2010	89.7% of P-3 students (Spring, 2010) strongly agree or agree that they demonstrate this competency: (HRQOL and PROs)	Criterion Met

## Appendix 13.1

### Ferris State University College of Pharmacy Course Content Evaluations Professional Year 1, Fall, 2009

	Did course cover the material listed through lecture, assigned readings or use other media?	Was there any additional material presented beyond that listed in the course outline?	Were examinations consistent with the topics presented through lecture, assigned readings or other instructional methods?
PHAR 311 Medical Biochemistry			
Yes	90.4%	58.8%	71.9%
No	9.6%	40.4%	26.3%
Comments		59 Students - Stated that topics related to nutrition were covered; (6) on Diabetes; (3) on cholesterol.	
PHAR 315 Pathophysiologic Basis of Therapeutics 1			
Yes	66.7%	23.7%	99.1%
No	31.6%	74.6%	0.9%
Comments		6 Students - "Microbiology"	
PHAR 318 Drug Delivery 1			
Yes	93.9%	10.5%	97.4%
No	5.3%	89.5%	1.8%
Comments		(1) polymers; (2) pharmaceutical aerosols.	
PHAR 328 Pharmaceutical Calculations			
Yes	97.4%	9.6%	97.4%
No	1.8%	89.5%	1.8%
Comments		(2) Abbreviations	
PHAR 334 Pharmacy and Healthcare in the United States			
Yes	98.2%	11.4%	96.5%
No	0.9%	86.8%	2.6%
Comments		(3) Ethical dilemmas.	
PHAR 335 Clinical Communications			
Yes	95.6%	10.5%	98.2%
No	4.4%	87.7%	1.8%

Comments		(4) Learning styles; (1) Blooms Taxonomy (2) personality types	
PHAR 385 Practice Skills Lab 1			
Yes	93.0%	8.8%	97.4%
No	6.1%	90.4%	1.8%
Comments			
Were topics unnecessarily duplicated between classes during the semester.	16.7% of students responded "Yes" and 81.6% of students responded "No".	(7) Cholesterol, CV; (8) Some duplications but it was beneficial; (4) topics in Pharmacy and HC in US and Clin Comm.	
Were topics reasonably coordinated between classes during the semester.	94.7% of students responded "Yes" and 3.5% of students responded "No".	As noted above, better coordination between courses.	

Ferris State University College of Pharmacy  
Course Content Evaluations  
Professional Year 1, Fall, 2009

	Did course cover the material listed through lecture, assigned readings or use other media?	Was there any additional material presented beyond that listed in the course outline?	Were examinations consistent with the topics presented through lecture, assigned readings or other instructional methods?
PHAR 312 Molecular Bioch & Biotechnology			
Yes	80 (87.9%)	7 (7.8%)	50 (54.3%)
No	11 (12.1%)	83 (92.2%)	42 (45.7%)
Comments	(2) Stated the biotech section was rushed; (2) Neurotransmission and Neurotransmitters; (1) Tumor Suppressor Pathways and Apoptosis; (1) Organization and functions of selected components of cells, biological membranes, proteomics and clinical practice, pharmacogenomics and clinical practice.	Random bits about e coli function which we will not need	N/A
PHAR 316 Pathophysiologic Basis of Therapeutics 2			
Yes	23 (25.6%)	8 (8.8%)	91 (98.9%)
No	67 (74.4%)	83 (91.2%)	1 (1.1%)
Comments	(67) Stated dermatologics, EENT	(2) Stated Gastrointestinal disorders, (1) Respiratory disorders; (1) Diabetes	N/A
PHAR 319 Drug Delivery 2			
Yes	64 (70.3%)	13 (14.3)	91 (100%)
No	27 (29.7%)	78 (85.7%)	0 (0%)
Comments	(27) Stated Nanotechnology	(1) Stated bioavailability; (1) Reaction mechanisms; (2) Kinetics; (3) Tablets and capsule making; (3) Polymers; (1) Bioequivalence	N/A
PHAR 340 Nonpres Medicine & Self Care	None	(1) Stated Patient counseling; (1) Sunscreens and sunblocks; (1) Diabetic monitoring devices	N/A
Yes	90 (98.9%)	9 (9.8%)	91 (98.9%)

No	1 (1.1%)	83 (90.2)	1 (1.1%)
Comments			
PHAR 386 Practice Skills Lab 2	(3) Stated Final Exam	(1) Stated Sexual health; (1) Counseling and Presentation; (1) Cold and flu medications	N/A
Yes	89 (96.7%)	6 (6.5%)	90 (98.9%)
No	3 (3.3%)	86 (93.5%)	1 (1.1%)
Comments			
Were topics unnecessarily duplicated between classes during the semester.	4 (4.4%) students responded "Yes" and 86 (95.6%) students responded "No".	(2) Stated some topics, but it helped; (1) OTC's and (1) Home Testing in class and lab; (1) Vitamins in Biochem 1 and OTC's; (1) Bioequivalence	
Were topics reasonably coordinated between classes during the semester.	89 (96.7%) students responded "Yes" and 3 (3.3%) students responded "No".	(2) Stated coordination lacked between Biochem 1 and 2; (3) Stated that overlap was helpful;	

## Appendix 14.1

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### Approved Elective APPEs for 2009 Curriculum

PHAR 650 Special Topics in Inpatient Medicine  
Elective APPEs consolidated under this title

- PHPR 604 Clinical Pharmacokinetics
- PHPR 608 Pediatric Medicine
- PHPR 614 Long term care
- PHPR 619 Pain Management
- PHPR 620 Cardiology
- PHPR 622 Pulmonary Medicine
- PHPR 623 Trauma Care
- PHPR 624 Critical Care
- PHPR 630 Emergency Medicine
- PHPR 632 Surgical Care
- PHPR 636 Nutrition
- PHPR 640 Psychiatry
- PHPR 642 Addiction Medicine
- PHPR 648 Infectious Disease
- PHPR 652 Oncology
- PHPR 660 Neonatology
- PHPR 664 Geriatrics

PHAR 655 Special Topics in Ambulatory Care  
Elective APPEs consolidated under this title

- PHPR 615 Hospice Care
- PHPR 616 Homecare
- PHPR 621 HIV/AIDS

- PHAR 617 Hospital Pharmacy Administration
- PHAR 618 Managed Care Pharmacy
- PHAR 626 Veterinary Medicine
- PHAR 628 Nuclear Pharmacy
- PHAR 661 Corporate Pharmacy
- PHAR 662 Pharmaceutical Industry
- PHAR 663 Health Systems Pharmacy
- PHAR 666 International Pharmacy

Electives not yet converted to 2009 Curriculum

- PHPR 605 Academic Pharmacy Experience
- PHPR 606 Drug Information Clerkship
- PHPR 607 Drug Use Policy Clerkship
- PHPR 609 Professional Organization Management Clerkship
- PHPR 612 Rural Health Clerkship
- PHPR 613 Community Pharmacy Management Clerkship
- PHPR 625 Community Pharmacy Practice
- PHPR 670 Clinical Research Clerkship

Appendix 14.3

Advanced Pharmacy Practice Experience Evaluation

Patient Care

Student: \_\_\_\_\_  
Site: \_\_\_\_\_  
Signature: \_\_\_\_\_

Preceptor: \_\_\_\_\_  
Date: \_\_\_\_\_  
Signature: \_\_\_\_\_

*Please use the numbers below to evaluate each outcome  
(do not assign any number between 1 and 6):*

- 10 = performance exceeds expectations
- 9 = performance meets expectations
- 8 = performance meets expectations with minor improvement needed
- 7 = performance below expectations
- 0 = unsatisfactory performance

**Scores of less than 7 cannot be given EXCEPT for a zero**

**A score < 8 requires comments by the instructor**

I. **Communication Skills [20%]** \_\_\_\_\_ (40 points possible) X 0.50 = \_\_\_\_\_

- \_\_\_\_\_ Write accurately and clearly
- \_\_\_\_\_ Speak accurately and clearly with patients
- \_\_\_\_\_ Speak accurately and clearly with health care providers, peers and preceptors
- \_\_\_\_\_ Provide education to patients and other healthcare providers

Comments:



**II. Patient Specific and Population-based Disease Management: Pharmacotherapy [40%]**  
\_\_\_\_\_ (80 points possible) X 0.50 = \_\_\_\_\_

- \_\_\_\_\_ Collect appropriate data efficiently and accurately to effectively assess the drug therapy
- \_\_\_\_\_ Establish reasonable and evidence based goals for therapy
- \_\_\_\_\_ Assess and optimize drug therapy using patient specific and evidence based data
- \_\_\_\_\_ Develop recommendations that take into account all available data, are evidence based and appropriate
- \_\_\_\_\_ Establish reasonable and evidence based monitoring plans
- \_\_\_\_\_ Evaluate the medication doses for appropriateness (including pharmacokinetics)
- \_\_\_\_\_ Assume responsibility for drug-related patient outcomes
- \_\_\_\_\_ Work well within the multidisciplinary team

Comments:

**III. Patient Specific and Population-based Disease Management: Drug Information [20%]**  
\_\_\_\_\_ (40 points possible) X 0.50 = \_\_\_\_\_

- \_\_\_\_\_ Identify the question being asked and find appropriate literature sources to respond to the request
- \_\_\_\_\_ Synthesize conclusions that are appropriate and based on application of the literature
- \_\_\_\_\_ Independently evaluate the literature
- \_\_\_\_\_ Apply literature findings to daily practice

Comments:

**IV. Professionalism [20%] \_\_\_\_\_ (40 points possible) X 0.50 = \_\_\_\_\_**

\_\_\_\_\_ Demonstrate ethical and legal standards in all areas of practice

\_\_\_\_\_ Conduct regular self-assessment of rotation performance and take corrective action based on self assessment and feedback from preceptor

\_\_\_\_\_ Maintain a positive and supportive attitude and demonstrate strong effort

\_\_\_\_\_ Display professionalism in pharmacy practice

Comments:

1. Add sections I-IV
2. **Stop Here** if no additional graded components. Added sections I-IV will be **100%** of grade. Please fill out strengths and weaknesses.
3. **Continue On** if you have additional projects to include. Added sections I-IV will be **75%** of grade.  
 Section I-IV points (75% of grade): \_\_\_\_\_ (100 points possible) X 0.75 = \_\_\_\_\_ pts

**V. Additional Responsibilities (i.e. final exam, reflective journaling, other projects not fitting into above sections) (25% of grade)**

Total Score \_\_\_\_\_ % x 0.25 = \_\_\_\_\_ pts

**VI. Final Grade**

\_\_\_\_\_ (points from I-IV) + \_\_\_\_\_ (points from V) = \_\_\_\_\_ % = \_\_\_\_\_ final grade

A	92.5-100%
A-	90-92.4%
B+	87.4-89.9%
B	82.5-87.4%
B-	80.0-82.4%
C+	77.4-79.9%
C	70.0-77.4%
F	<70%

**VII. Strengths:**

**VIII. Areas for Improvement:**

## Appendix 15.1

### Assessment Plan

#### Ferris State University Program - Pharmacy (Pharm. D.)

Appendix 15.1.  
Note: Report is abbreviated.

#### Program - Pharmacy (Pharm. D.)

**Mission Statement:** "The College of Pharmacy fosters the development of its students, faculty and pharmacists into practitioners who positively influence the health outcomes of the people of Michigan, the Great Lakes region, the nation and the global community."

In achieving its mission, the College of Pharmacy is guided by the Vision and Core Values of Ferris State University and is committed to:

- A) Providing the highest quality pharmacy professional education to students and practitioners;
- B) Promoting the delivery of patient-centered care by pharmacists that are committed to the safe and appropriate use of medications.
- C) Developing and maintaining relationships with alumni, professional associations and the health care industry which advance the goals and objectives of the college and the profession;
- D) The personal and professional development of each faculty member to meet the pedagogical, scholarly and service demands of a dynamic curriculum and profession; and
- E) The creation of a professional community that embodies the principles of ethics, fairness, honesty, civility and respect for peoples' diversity in ideas, beliefs and cultures.

**Advisory Board/Committee Meetings:** More than twice per year

**Next FSU Academic Program Review:** 2010-2011

**Accreditation Body:** Accreditation Council for Pharmacy Education

**Academic Year of Next Accreditation Review:** 2010-2011

**College:** PHR

#### Outcome: Patient-Specific and Population-based Disease Management (Level 1)

Gather, organize and evaluate information in order to provide patient-specific and population-based disease management.

**Outcome Type:** Learning

**Outcome Status:** Active

Means of Assessment			
Assessment Method	Criterion for Success	Assessment Schedule	Active
Section 1 AACP Graduate Survey - Professional Competencies: Graduate evaluates their competency (Q 17) to interpret economic data relevant to drug management and specific diseases. <b>Assessment Method Category:</b> Survey - Graduate (Current Year)	Favorable comparison to national averages for other participating Colleges of Pharmacy, or at least 2/3 students rating agree or strongly agree.	Annual	Yes

#### Related Courses

- \* PHAR 311 - Medical Biochemistry
- \* PHAR 312 - Molecular Bioc and Biotechnology
- \* PHAR 315 - Pathophysiologic Basis for Therap 1
- \* PHAR 316 - Pathophysiologic Basis for Therap 2
- \* PHAR 318 - Drug Delivery 1
- \* PHAR 319 - Drug Delivery 2
- \* PHAR 328 - Pharmaceutical Calculations
- \* PHAR 334 - Pharmacy and Health Care in the US
- \* PHAR 335 - Clinical Communications
- \* PHAR 340 - Nonpres medici and Self-care
- \* PHAR 385 - Practice Skills Lab 1

- \* PHAR 386 - Practice Skills Lab 2
- \* PHAR 411 - Drug Action 1
- \* PHAR 412 - Drug Action 2
- \* PHAR 413 - Drug Action 3
- \* PHAR 414 - Drug Action 4
- \* PHAR 421 - Infectious Disease 1
- \* PHAR 422 - Infectious Disease 2
- \* PHAR 428 - Pharmacokinetics
- \* PHAR 485 - Practice Skills Lab 3
- \* PHAR 486 - Practice Skills Lab 4
- \* PHAR 491 - Longitudinal Patient 1 IPPE
- \* PHAR 493 - Institutional IPPE
- \* PHAR 511 - Pharmacotherapeutics 1
- \* PHAR 512 - Pharmacotherapeutics 2
- \* PHAR 513 - Pharmacotherapeutics 3
- \* PHAR 514 - Pharmacotherapeutics 4
- \* PHAR 530 - Pharmacy Law
- \* PHAR 540 - Drug Lit Eval/Research Methods
- \* PHAR 585 - Practice Skills Lab 5
- \* PHAR 586 - Practice Skills Lab 6
- \* PHAR 591 - Longitudinal Patient 2 IPPE
- \* PHAR 680 - Clinical Seminar (0.5 x 2)

**Outcome: Patient-Specific and Population-based Disease Management (Level 2)**

Analyze patient information in order to provide patient-specific and population-based disease management

**Outcome Type:** Learning

**Outcome Status:** Active

Means of Assessment			
Assessment Method	Criterion for Success	Assessment Schedule	Active
Section 1 AACP Graduate Survey - Professional Competencies: Graduate evaluates their competency (Q 16) in interpreting epidemiologic data relevant to specific diseases and their management. <b>Assessment Method Category:</b> Survey - Graduate (Current Year)	Favorable comparison to national averages for other participating Colleges of Pharmacy; or at least 2/3 students rating agree or strongly agree.	Annual	Yes
Section 3 AACP Graduate Survey - Pharmacy Practice Experiences: Graduate evaluates the extent to which (Q 41) the advanced practice experiences in the community pharmacy setting were able to develop their patient care skills. <b>Assessment Method Category:</b> Survey - Graduate (Current Year)	Favorable comparison to national averages for other Colleges of Pharmacy; or at least 2/3 students rating agree or strongly agree.	Annual	Yes
Section 3 AACP Graduate Survey - Pharmacy Practice Experience: Graduate evaluates the extent to which (Q 42) the advanced practices experiences in the ambulatory care setting were able to develop their patient care skills. <b>Assessment Method Category:</b> Survey - Graduate (Current Year)	Favorable comparison to national averages for other Colleges of Pharmacy; or at least 2/3 students rating agree or strongly agree.	Annual	Yes
Section 3 AACP Graduate Survey - Pharmacy Practice Experience: Graduate evaluates the extent to which (Q 43) the advanced practice experiences in the hospital or health system pharmacy setting were able to develop their patient care skills.	Favorable comparison to national averages for other Colleges of Pharmacy; or at least 2/3 students rating agree or strongly	Annual	Yes

Means of Assessment			
Assessment Method	Criterion for Success	Assessment Schedule	Active
	agree.		
<b>Assessment Method Category:</b> Survey - Graduate (Current Year)			
Section 3 AACP Graduate Survey - Pharmacy Practice Experiences: Graduate evaluates the extent to which (Q 44) the advanced practice experiences in the inpatient/acute care setting were able to develop their patient care skills. <b>Assessment Method Category:</b> Survey - Graduate (Current Year)	Favorable comparison to national averages for other Colleges of Pharmacy; or at least 2/3 students rating agree or strongly agree.	Annual	Yes
Section 3 AACP Graduate Survey - Pharmacy Practice Experiences: Graduate evaluates the extent to which (Q 45) the need for continuity of care throughout the health care system was emphasized in the advanced pharmacy practice experiences. <b>Assessment Method Category:</b> Survey - Graduate (Current Year)	Favorable comparison to national averages for other Colleges of Pharmacy; or at least 2/3 students rating agree or strongly agree.	Annual	Yes

#### Related Courses

- \* PHAR 311 - Medical Biochemistry
- \* PHAR 312 - Molecular Bio and Biotechnology
- \* PHAR 315 - Pathophysiologic Basis for Therap 1
- \* PHAR 316 - Pathophysiologic Basis for Therap 2
- \* PHAR 318 - Drug Delivery 1
- \* PHAR 319 - Drug Delivery 2
- \* PHAR 335 - Clinical Communications
- \* PHAR 340 - Nonpres medici and Self-care
- \* PHAR 385 - Practice Skills Lab 1
- \* PHAR 388 - Practice Skills Lab 2
- \* PHAR 393 - Community IPPE
- \* PHAR 411 - Drug Action 1
- \* PHAR 412 - Drug Action 2
- \* PHAR 413 - Drug Action 3
- \* PHAR 414 - Drug Action 4
- \* PHAR 421 - Infectious Disease 1
- \* PHAR 422 - Infectious Disease 2
- \* PHAR 428 - Pharmacokinetics
- \* PHAR 485 - Practice Skills Lab 3
- \* PHAR 486 - Practice Skills Lab 4
- \* PHAR 491 - Longitudinal Patient 1 IPPE
- \* PHAR 493 - Institutional IPPE
- \* PHAR 511 - Pharmacotherapeutics 1
- \* PHAR 512 - Pharmacotherapeutics 2
- \* PHAR 513 - Pharmacotherapeutics 3
- \* PHAR 514 - Pharmacotherapeutics 4
- \* PHAR 530 - Pharmacy Law
- \* PHAR 540 - Drug Lit Eval/Research Methods
- \* PHAR 585 - Practice Skills Lab 5

- \* PHAR 586 - Practice Skills Lab 6
- \* PHAR 589 - Intergrated Case Studies
- \* PHAR 591 - Longitudinal Patient 2 IPPE
- \* PHAR 680 - Clinical Seminar (0.5 x 2)

**Outcome: Patient-Specific and Population-based Disease Management (Level 3)**

Implement, monitor, evaluate, adjust, document and communicate the patient-specific and/or population-based disease management plan.

**Outcome Type:** Learning

**Outcome Status:** Active

Means of Assessment			
Assessment Method	Criterion for Success	Assessment Schedule	Active
Section 1 AACP Graduate Survey - Professional Competencies: Four different competencies (Q12-15) are evaluated by each graduate including gathering and using patient specific data; developing a patient care plan; working with a health care team to implement a pharmaceutical care plan and documenting activities.	Favorable comparison to national averages for other participating Colleges of Pharmacy; or at least 2/3 students rating agree or strongly agree.	Annual	Yes
<b>Assessment Method Category:</b> Survey - Graduate (Current Year)			
Section 3 AACP Alumni Survey - Curriculum: Three questions (Q 31-33) asking alumni if the PharmD program prepared them to develop and use patient-specific pharmacy care plans; effectively manage a patient-centered pharmacy practice; and develop disease management programs.	Favorable comparison to national averages for other participating Colleges of Pharmacy; or at least 2/3 alumni rating agree or strongly agree.	Every three years	Yes
<b>Assessment Method Category:</b> Survey - Alumni (after one year)			
Section 3 AACP Preceptor Survey - Curriculum: Three competencies (16-18) of PharmD students are evaluated by preceptors, many of which are employers of our graduates related to their ability to develop and use patient-specific pharmacy care plans, effectively manage a patient-centered pharmacy practice, and develop disease management programs.	Favorable comparison to national averages for other participating Colleges of Pharmacy; or at least 2/3 of preceptors rating agree or strongly agree.	Every three years	Yes
<b>Assessment Method Category:</b> Survey - Employer			
Section 3 AACP Graduate Survey - Pharmacy Practice Experiences: Graduate evaluates the extent to which (Q 50) the advanced practice experiences were valuable in helping them to achieve the professional competencies.	Favorable comparison to national averages for other participating Colleges of Pharmacy; or at least 2/3 students rating agree or strongly agree.	Annual	Yes
<b>Assessment Method Category:</b> Survey - Graduate (Current Year)			

**Related Courses**

- \* PHAR 318 - Drug Delivery 1
- \* PHAR 319 - Drug Delivery 2
- \* PHAR 335 - Clinical Communications
- \* PHAR 340 - Nonpres medici and Self-care
- \* PHAR 385 - Practice Skills Lab 1
- \* PHAR 386 - Practice Skills Lab 2
- \* PHAR 393 - Community IPPE
- \* PHAR 411 - Drug Action 1

- \* PHAR 412 - Drug Action 2
- \* PHAR 413 - Drug Action 3
- \* PHAR 414 - Drug Action 4
- \* PHAR 421 - Infectious Disease 1
- \* PHAR 422 - Infectious Disease 2
- \* PHAR 428 - Pharmacokinetics
- \* PHAR 485 - Practice Skills Lab 3
- \* PHAR 486 - Practice Skills Lab 4
- \* PHAR 491 - Longitudinal Patient 1 IPPE
- \* PHAR 493 - Institutional IPPE
- \* PHAR 511 - Pharmacotherapeutics 1
- \* PHAR 512 - Pharmacotherapeutics 2
- \* PHAR 513 - Pharmacotherapeutics 3
- \* PHAR 514 - Pharmacotherapeutics 4
- \* PHAR 530 - Pharmacy Law
- \* PHAR 540 - Drug Lit. Eval/Research Methods
- \* PHAR 585 - Practice Skills Lab 5
- \* PHAR 586 - Practice Skills Lab 6
- \* PHAR 589 - Intergrated Case Studies
- \* PHAR 591 - Longitudinal Patient 2 IPPE
- \* PHAR 680 - Clinical Seminar (0.5 x 2)

**Outcome: Health Promotion (Level 1)**

Describe the basic elements of emergency care and health promotion.

**Outcome Type:** Learning

**Outcome Status:** Active

**Related Courses**

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- \* PHAR 334 - Pharmacy and Health Care in the US
- \* PHAR 335 - Clinical Communications
- \* PHAR 340 - Nonpres medici and Self-care
- \* PHAR 385 - Practice Skills Lab 1
- \* PHAR 386 - Practice Skills Lab 2
- \* PHAR 425 - Pharm Practice Mngment 1
- \* PHAR 485 - Practice Skills Lab 3
- \* PHAR 486 - Practice Skills Lab 4
- \* PHAR 511 - Pharmacotherapeutics 1
- \* PHAR 512 - Pharmacotherapeutics 2
- \* PHAR 513 - Pharmacotherapeutics 3
- \* PHAR 514 - Pharmacotherapeutics 4
- \* PHAR 535 - Sociopharm and Prof Ethics
- \* PHAR 585 - Practice Skills Lab 5
- \* PHAR 586 - Practice Skills Lab 6

**Outcome: Health Promotion (Level 2)**

Provide emergency care and develop health promotion services.

**Outcome Type:** Learning

**Outcome Status:** Active



Means of Assessment			
Assessment Method	Criterion for Success	Assessment Schedule	Active
Section 1 AACP Graduate Survey - Professional Competencies: Graduate evaluates their competency (Q 22) to interpret and apply drug use policy and health policy. <b>Assessment Method Category:</b> Survey - Graduate (Current Year)	Favorable comparison to national averages for other participating Colleges of Pharmacy; or at least 2/3 students rating agree or strongly agree.	Annual	Yes

#### Related Courses

- \* PHAR 335 - Clinical Communications
- \* PHAR 340 - Nonpres medication Self-care
- \* PHAR 385 - Practice Skills Lab 1
- \* PHAR 386 - Practice Skills Lab 2
- \* PHAR 425 - Pharm Practice Mngment 1
- \* PHAR 511 - Pharmacotherapeutics 1
- \* PHAR 512 - Pharmacotherapeutics 2
- \* PHAR 513 - Pharmacotherapeutics 3
- \* PHAR 514 - Pharmacotherapeutics 4
- \* PHAR 535 - Sociopharm and Prof Ethics
- \* PHAR 585 - Practice Skills Lab 5
- \* PHAR 586 - Practice Skills Lab 6
- \* PHAR 589 - Intergrated Case Studies

#### Outcome: Health Promotion (Level 3)

Provide health promotion services in accordance with social, professional, ethical, and legal guidelines.

**Outcome Type:** Learning

**Outcome Status:** Active

Means of Assessment			
Assessment Method	Criterion for Success	Assessment Schedule	Active
Section 1 AACP Graduate Survey - Professional Competencies: Graduate evaluates their competency (Q 24) at promoting wellness and disease prevention services. <b>Assessment Method Category:</b> Survey - Graduate (Current Year)	Favorable comparison to national averages for other participating Colleges of Pharmacy; or at least 2/3 students rating agree or strongly agree.	Annual	Yes
Section 3 AACP Alumni Survey - Curriculum: Alumni evaluates the extent to which the PharmD program (Q 35) prepared them to promote the availability of health promotion and disease prevention initiatives. <b>Assessment Method Category:</b> Survey - Alumni (after one year)	Favorable comparison to national averages for other participating Colleges of Pharmacy; or at least 2/3 alumni rating agree or strongly agree.	Every 3 years	Yes
Section 3 AACP Preceptor Survey - Curriculum: PharmD students are evaluated by preceptors (Q 20), many of which are employers of our graduates related to their ability to promote the availability of health promotion and disease prevention initiatives. <b>Assessment Method Category:</b> Survey - Employer	Favorable comparison to national averages for other participating Colleges of Pharmacy; or at least 2/3 preceptors rating agree or strongly agree.	Every three years	Yes

#### Related Courses

- \* PHAR 315 - Pathophysiologic Basis for Therap 1

## Appendix 15.2

### \*\*Unit Assessment Report - Four Column

#### Ferris State University

#### Program - Pharmacy (Pharm. D.)

Appendix 15.2.  
Note: Report is abbreviated.

**Mission Statement:** "The College of Pharmacy fosters the development of its students, faculty and pharmacists into practitioners who positively influence the health outcomes of the people of Michigan, the Great Lakes region, the nation and the global community."

In achieving its mission, the College of Pharmacy is guided by the Vision and Core Values of Ferris State University and is committed to:

- A) Providing the highest quality pharmacy professional education to students and practitioners;
- B) Promoting the delivery of patient-centered care by pharmacists that are committed to the safe and appropriate use of medications.
- C) Developing and maintaining relationships with alumni, professional associations and the health care industry which advance the goals and objectives of the college and the profession;
- D) The personal and professional development of each faculty member to meet the pedagogical, scholarly and service demands of a dynamic curriculum and profession; and
- E) The creation of a professional community that embodies the principles of ethics, fairness, honesty, civility and respect for peoples' diversity in ideas, beliefs and cultures.

**Advisory Board/Committee Meetings:** More than twice per year  
**Next FSU Academic Program Review:** 2010-2011  
**Accreditation Body:** Accreditation Council for Pharmacy Education  
**Academic Year of Next Accreditation Review:** 2010-2011  
**College:** PHR

Outcomes	Means of Assessment & Criteria for Success / Tasks	Results	Action & Follow-Up
Program - Pharmacy (Pharm. D.) - Patient-Specific and Population-based Disease Management (Level 1) - Gather, organize and evaluate information in order to provide patient-specific and population-based disease management. <b>Outcome Types:</b> Learning <b>Outcome Status:</b> Active	<b>Assessment Method:</b> Section 1 AACCP Graduate Survey - Professional Competencies: Graduate evaluates their competency (Q 17) to interpret economic data relevant to drug management and specific diseases. <b>Assessment Method Category:</b> Survey - Graduate (Current Year) <b>Criterion for Success:</b> Favorable comparison to national averages for other participating Colleges of Pharmacy; or at least 2/3 students rating agree or strongly agree.	09/21/2009 - 74.1% of graduates strongly agreed or agreed. <b>Classification:</b> Criterion Met <b>Action:</b> 1 - No Action Required	
			05/13/2008 - 77.8% of respondents strongly agree or agree <b>Classification:</b> Criterion Met <b>Action:</b> 1 - No Action Required

Outcomes	Means of Assessment & Criteria for Success / Tasks	Results	Action & Follow-Up
Program - Pharmacy (Pharm. D.) - Patient-Specific and Population-based Disease Management (Level 2) - Analyze patient information in order to provide patient-specific and population-based disease management. <b>Outcome Types:</b> Learning <b>Outcome Status:</b> Active	<b>Assessment Method:</b> Section 1 AACP Graduate Survey - Professional Competencies: Graduate evaluates their competency (Q 16) in interpreting epidemiologic data relevant to specific diseases and their management.	09/21/2009 - 74.1% of graduates strongly agreed or agreed.	<b>Classification:</b> Criterion Met <b>Action:</b> 1 - No Action Required
	<b>Assessment Method Category:</b> Survey - Graduate (Current Year) <b>Criterion for Success:</b> Favorable comparison to national averages for other participating Colleges of Pharmacy; or at least 2/3 students rating agree or strongly agree.	05/13/2008 - 84.1% of respondents strongly agree or agree	<b>Classification:</b> Criterion Met <b>Action:</b> 1 - No Action Required
	<b>Assessment Method:</b> Section 3 AACP Graduate Survey - Pharmacy Practice Experiences: Graduate evaluates the extent to which (Q 41) the advanced practice experiences in the community pharmacy setting were able to develop their patient care skills.	09/21/2009 - 75.8% of graduates strongly agreed or agreed.	<b>Classification:</b> Criterion Met <b>Action:</b> 1 - No Action Required
	<b>Assessment Method Category:</b> Survey - Graduate (Current Year) <b>Criterion for Success:</b> Favorable comparison to national averages for other Colleges of Pharmacy; or at least 2/3 students rating agree or strongly agree.	05/13/2008 - 69% of respondents strongly agree or agree	<b>Classification:</b> Criterion Met <b>Action:</b> 1 - No Action Required
	<b>Assessment Method:</b> Section 3 AACP Graduate Survey - Pharmacy Practice Experience: Graduate evaluates the extent to which (Q 42) the advanced practice experiences in the ambulatory care setting were able to develop their patient care skills.	09/21/2009 - 86.3% of graduates strongly agreed or agreed.	<b>Classification:</b> Criterion Met <b>Action:</b> 1 - No Action Required
	<b>Assessment Method Category:</b> Survey - Graduate (Current Year) <b>Criterion for Success:</b> Favorable comparison to national averages for other Colleges of Pharmacy; or at least 2/3 students rating agree or strongly agree.	05/13/2008 - 87.6 of respondents strongly agree or agree	<b>Classification:</b> Criterion Met <b>Action:</b> 1 - No Action Required

Outcomes	Means of Assessment & Criteria for Success / Tasks	Results	Action & Follow-Up
	<b>Assessment Method:</b> Section 3 AACP Graduate Survey - Pharmacy Practice Experience: Graduate evaluates the extent to which (Q 43) the advanced practice experiences in the hospital or health system pharmacy setting were able to develop their patient care skills.	09/21/2009 - 87.9% of graduates strongly agreed or agreed. <b>Classification:</b> Criterion Met <b>Action:</b> 1 - No Action Required	
	<b>Assessment Method Category:</b> Survey - Graduate (Current Year) <b>Criterion for Success:</b> Favorable comparison to national averages for other Colleges of Pharmacy; or at least 2/3 students rating agree or strongly agree.	05/13/2008 - 84.9% of respondents strongly agree or agree <b>Classification:</b> Criterion Met <b>Action:</b> 1 - No Action Required	
	<b>Assessment Method:</b> Section 3 AACP Graduate Survey - Pharmacy Practice Experiences: Graduate evaluates the extent to which (Q 44) the advanced practice experiences in the inpatient/acute care setting were able to develop their patient care skills.	09/21/2009 - 89.7% of graduates strongly agreed or agreed. <b>Classification:</b> Criterion Met <b>Action:</b> 1 - No Action Required	
	<b>Assessment Method Category:</b> Survey - Graduate (Current Year) <b>Criterion for Success:</b> Favorable comparison to national averages for other Colleges of Pharmacy; or at least 2/3 students rating agree or strongly agree.	05/13/2008 - 82.3% of respondents strongly agree or agree <b>Classification:</b> Criterion Met <b>Action:</b> 1 - No Action Required	
	<b>Assessment Method:</b> Section 3 AACP Graduate Survey - Pharmacy Practice Experiences: Graduate evaluates the extent to which (Q 45) the need for continuity of care throughout the health care system was emphasized in the advanced pharmacy practice experiences.	09/21/2009 - 82.7% of graduates strongly agreed or agreed. <b>Classification:</b> Criterion Met <b>Action:</b> 1 - No Action Required	
	<b>Assessment Method Category:</b> Survey - Graduate (Current Year) <b>Criterion for Success:</b> Favorable comparison to national averages for other Colleges of Pharmacy; or at least 2/3 students rating agree or strongly agree.	05/13/2008 - 85% of respondents strongly agree or agree <b>Classification:</b> Criterion Met <b>Action:</b> 1 - No Action Required	

Outcomes	Means of Assessment & Criteria for Success / Tasks	Results	Action & Follow-Up
<p>Program - Pharmacy (Pharm. D.) - Patient-Specific and Population-based Disease Management (Level 3) - Implement, monitor, evaluate, adjust, document and communicate the patient-specific and/or population-based disease management plan.</p> <p><b>Outcome Types:</b> Learning</p> <p><b>Outcome Status:</b> Active</p>	<p><b>Assessment Method:</b> Section 1 AACP Graduate Survey - Professional Competencies: Four different competencies (Q12-15) are evaluated by each graduate including gathering and using patient specific data; developing a patient care plan, working with a health care team to implement a pharmaceutical care plan and documenting activities.</p>	<p>09/21/2009 - Across this group of questions, an average of 87.5% of graduates strongly agreed or agreed. There were no questions below the 2/3 threshold.</p> <p><b>Classification:</b> Criterion Met</p> <p><b>Action:</b> 1 - No Action Required</p>	
	<p><b>Assessment Method Category:</b> Survey - Graduate (Current Year)</p> <p><b>Criterion for Success:</b> Favorable comparison to national averages for other participating Colleges of Pharmacy; or at least 2/3 students rating agree or strongly agree.</p>	<p>05/13/2008 - #9 (97.3%); #10 (97.3%); #11 (88.5%); #12 (86.7%) of respondents strongly agree or agree</p> <p><b>Classification:</b> Criterion Met</p> <p><b>Action:</b> 1 - No Action Required</p>	
	<p><b>Assessment Method:</b> Section 3 AACP Alumni Survey - Curriculum: Three questions (Q 31-33) asking alumni if the PharmD program prepared them to develop and use patient-specific pharmacy care plans; effectively manage a patient-centered pharmacy practice; and develop disease management programs.</p> <p><b>Assessment Method Category:</b> Survey - Alumni (after one year)</p> <p><b>Criterion for Success:</b> Favorable comparison to national averages for other participating Colleges of Pharmacy; or at least 2/3 alumni rating agree or strongly agree.</p>	<p>05/13/2008 - All three questions met criterion #31 (94.6%); #32 (90.1); and #33 (75%)</p> <p><b>Classification:</b> Criterion Met</p> <p><b>Action:</b> 1 - No Action Required</p>	
	<p><b>Assessment Method:</b> Section 3 AACP Preceptor Survey - Curriculum: Three competencies (16-18) of PharmD students are evaluated by preceptors, many of which are employers of our graduates related to their ability to develop and use patient-specific pharmacy care plans; effectively manage a patient-</p>	<p>05/13/2008 - #16 (88.5%); #17 (84.5%); #18 (82.4%) of respondents strongly agree or agree</p> <p><b>Classification:</b> Criterion Met</p> <p><b>Action:</b> 1 - No Action Required</p>	

Outcomes	Means of Assessment & Criteria for Success / Tasks	Results	Action & Follow-Up
	<p>centered pharmacy practice; and develop disease management programs.</p> <p><b>Assessment Method Category:</b> Survey - Employer</p> <p><b>Criterion for Success:</b> Favorable comparison to national averages for other participating Colleges of Pharmacy; or at least 2/3 of preceptors rating agree or strongly agree.</p> <p><b>Assessment Method:</b> Section 3 AACCP Graduate Survey - Pharmacy Practice Experiences: Graduate evaluates the extent to which (Q 50) the advanced practice experiences were valuable in helping them to achieve the professional competencies.</p> <p><b>Assessment Method Category:</b> Survey - Graduate (Current Year)</p> <p><b>Criterion for Success:</b> Favorable comparison to national averages for other participating Colleges of Pharmacy; or at least 2/3 students rating agree or strongly agree.</p>	<p>05/13/2008 - #16 (88.5%); #17 (84.5%); #18 (82.4%) of respondents strongly agree or agree</p> <p><b>Classification:</b> Criterion Met</p> <p><b>Action:</b> 1 - No Action Required</p> <hr/> <p>09/21/2009 - 89.7% of graduates strongly agreed or agreed.</p> <p><b>Classification:</b> Criterion Met</p> <p><b>Action:</b> 1 - No Action Required</p> <hr/> <p>05/13/2008 - 93.8% of respondents strongly agree or agree</p> <p><b>Classification:</b> Criterion Met</p> <p><b>Action:</b> 1 - No Action Required</p>	
<p>Program - Pharmacy (Pharm. D.) - Health Promotion (Level 1) - Describe the basic elements of emergency care and health promotion.</p> <p><b>Outcome Types:</b> Learning</p> <p><b>Outcome Status:</b> Active</p>			
<p>Program - Pharmacy (Pharm. D.) - Health Promotion (Level 2) - Provide emergency care and develop health promotion services.</p> <p><b>Outcome Types:</b> Learning</p>	<p><b>Assessment Method:</b> Section 1 AACCP Graduate Survey - Professional Competencies: Graduate evaluates their competency (Q 22) to interpret and apply drug use policy and health policy.</p> <p><b>Assessment Method Category:</b></p>	<p>09/18/2009 - 89.6% of graduates strongly agree or agree.</p> <p><b>Classification:</b> Criterion Met</p> <p><b>Action:</b> 1 - No Action Required</p>	

Outcomes	Means of Assessment & Criteria for Success / Tasks	Results	Action & Follow-Up
<b>Outcome Status:</b> Active	Survey - Graduate (Current Year) <b>Criterion for Success:</b> Favorable comparison to national averages for other participating Colleges of Pharmacy; or at least 2/3 students rating agree or strongly agree.	05/13/2008 - 78.8% of respondents strongly agree or agree <b>Classification:</b> Criterion Met <b>Action:</b> 1 - No Action Required	
Program - Pharmacy (Pharm. D.) - Health Promotion (Level 3) - Provide health promotion services in accordance with social, professional, ethical, and legal guidelines. <b>Outcome Types:</b> Learning <b>Outcome Status:</b> Active	<b>Assessment Method:</b> Section 1 AACP Graduate Survey - Professional Competencies: Graduate evaluates their competency (Q 24) at promoting wellness and disease prevention services. <b>Assessment Method Category:</b> Survey - Graduate (Current Year) <b>Criterion for Success:</b> Favorable comparison to national averages for other participating Colleges of Pharmacy; or at least 2/3 students rating agree or strongly agree. <b>Assessment Method:</b> Section 3 AACP Alumni Survey - Curriculum: Alumni evaluates the extent to which the PharmD program (Q 35) prepared them to promote the availability of health promotion and disease prevention initiatives. <b>Assessment Method Category:</b> Survey - Alumni (after one year) <b>Criterion for Success:</b> Favorable comparison to national averages for other participating Colleges of Pharmacy; or at least 2/3 alumni rating agree or strongly agree. <b>Assessment Method:</b> Section 3 AACP Preceptor Survey - Curriculum: PharmD students are evaluated by preceptors (Q 20), many of which are employers of our graduates related to their	09/21/2009 - 86.2% of graduates strongly agree or agree. <b>Classification:</b> Criterion Met <b>Action:</b> 1 - No Action Required 05/13/2008 - 95.6% of respondents strongly agree or agree <b>Classification:</b> Criterion Met <b>Action:</b> 1 - No Action Required 05/13/2008 - 76% of respondents strongly agree or agree <b>Classification:</b> Criterion Met <b>Action:</b> 1 - No Action Required 05/13/2008 - 79.8% of respondents strongly agree or agree <b>Classification:</b> Criterion Met <b>Action:</b>	

## Appendix 16.1

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### Admission Criteria

- Academic achievement in required pre-pharmacy courses as reflected in GPA for individual course sequences, as well as overall;
- Pharmacy College Admission Test (PCAT) (Note: Although composite score is important, the CPAC reserves the right to deny admission due to poor performance on any single subcomponent of the PCAT);
- Results of an in-person interview, including verbal and written components (e.g. communication skills, understanding of the profession, leadership qualities, etc.);
- College of Pharmacy Technical Standards for Admission (soon to be available);
- Course load (e.g. average number of hours/semester, repeats, withdrawals); and
- Supplemental Application information as requested by CPAC.
- Results of a criminal background check that demonstrates the applicant does not have convictions identified in Michigan Public Acts 27, 28, and 29; or those which preclude a significant number of College of Pharmacy experiential assignments (See Section: Criminal Background Check below). NOTE: This is a condition of final acceptance to the program and will be conducted after initial screening of applicants and invitations to the program are extended. A criminal background check is not required as part of the online application process; however, applicants must make a disclosure as outlined in the application.



## Appendix 16.2

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### TECHNICAL STANDARDS FOR STUDENTS ADMITTED TO THE DOCTOR OF PHARMACY DEGREE PROGRAM

Students graduating from the Doctor of Pharmacy (Pharm.D.) Degree program are eligible to take the North American Pharmacist Licensure Exam (NAPLEX)/Multistate Pharmacy Jurisprudence Examination (MPJE) and, if successful in passing each exam, may then practice under a state licensure without restriction. As a result, conferring the Pharm.D. degree requires that the College of Pharmacy insure that each student acquire and apply a body of knowledge and professional skills essential to the roles and functioning of a pharmacist. These essential skills are necessary to insure the safety of patients served by the student and pharmacist. Each student must be able to demonstrate proficiency in these skills with or without reasonable accommodation. This document outlines the technical standards that a student must possess, in addition to the successful completion of all of the academic/curricular requirements for the Pharm.D. degree.

The College of Pharmacy Admission Committee reserves the right to deny admission to any applicant who cannot meet these Technical Standards as determined by the application process, interview and student disclosure. In addition, the College of Pharmacy reserves the right to dismiss any student from the program who either fails to disclose information relevant to their qualifications under the Technical Standards, or falls out of compliance with the Technical Standards after admission to the program. The student may need to demonstrate proficiency in these Technical Standards at different points during the professional degree program.

It is understood that the application documents and on-site interview may not adequately evaluate the student's abilities on these Technical Standards. As a result, the applicant should evaluate him/herself on each of the Technical Standards. If an applicant believes they may be unable to meet the Technical Standards of the program, they should contact the Office of the Assistant Dean of Student Affairs of the College of Pharmacy to discuss the issue.

#### **Technical Standards (Skill Areas) – The applicant must meet required aptitude, abilities and skills in the areas identified below:**

**Observations:** An applicant or student must be able to combine the functional use of visual, auditory and somatic senses to observe and demonstrate professional knowledge and skills presented in the classroom, laboratories and practice settings. This includes being able to observe a patient accurately at a distance and close at hand, noting verbal and nonverbal signals; visualizing and discriminating findings on a computer monitor or electronic instrumentation display; visualizing and discriminating printed or handwritten words and numbers from a prescription or physician's order; and observing and evaluating distinguishing text and characteristics of pre-manufactured and extemporaneously prepared or compounded medications.

**Communication:** An applicant or student must be able to communicate and perceive in verbal, nonverbal and written ways with patients and their designated caregivers with a sense of compassion and empathy. This includes the ability to communicate effectively in oral and written (grammar, spelling) English with patients and all members of the health care team. Specific requirements include but are not limited to the following abilities: communicating with the health care team under various conditions in the patient care setting; giving and receiving information through telephone (or cell phone) conversations; eliciting information from another individual; communicating complex findings in a way that is understandable to others; documenting in handwritten or typewritten form to medical records or computer information systems; and recognizing and reacting appropriately to varying emotional states of patients including sadness, worry, anxiety, agitation and lack of comprehension of communications and instructions.

**Sensory and Motor Coordination and Function:** An applicant or student must possess sufficient motor function and skill to perform the essential functions in the practice of pharmacy. This includes but is not limited to: manipulation of small and large containers (jars, tubes, vials, bottles, syringes/needles) for the purpose of preparing them for dispensing to the patient; performance of basic emergency medical procedures including first aid, cardiopulmonary resuscitation (CPR) and airway obstruction management; basic physical assessment skills such as blood pressure, pulse, listening with a stethoscope; operation of health screening instruments (e.g. blood glucose, lipid level); and operation of computer equipment.

**Intellectual, Conceptual, Integrative and Quantitative Abilities:** An applicant or student must possess sufficient intellectual, conceptual, integrative and quantitative abilities to complete a rigorous didactic and experiential curriculum which includes measurement, reasoning, analysis, judgment, synthesis and numerical recognition and computation. It is especially important that applicants and students be able to perform rapid algebraic calculations for a variety of patient-care situations. Students must be able to read and assimilate data from different sources (patient history, laboratory data, physical assessment); provide a reasonable explanation and analysis of problems; make medical suggestions appropriately; develop patient counseling information at a level appropriate to the situation; and retain and recall information in an efficient and timely manner.

**Behavioral and Social Attributes:** An applicant or student must possess the emotional and mental health required for full utilization of their abilities, exercise good judgment and prompt completion of responsibilities. Empathy, integrity, honesty, concern for others, patience, good interpersonal skills, strong work ethic and motivation are required. Applicants and students must be capable of developing the maturity to maintain a professional demeanor and organization in the face of long hours, personal fatigue, and dissatisfied patients and colleagues under varying degrees of stress. Students will, at times, be required to work for extended periods of time outside of the 8am-5pm “work day”. Students must be able to maintain a level of behavior, demeanor, personal hygiene, communication and dress that is expected of patient and caregivers in acute, sub-acute and community practice settings, as well as the classroom and laboratory setting.

**Ethical Values:** An applicant and student must demonstrate a professional demeanor, conduct and behavior that are appropriate to his/her standing in the professional degree program. This includes compliance with the administrative rules applicable to the profession of pharmacy; and honor codes of the College of Pharmacy and Ferris State University. Under all circumstances, students must protect the confidentiality of any and all patient information in their professional and personal communications. Students must meet the ethical standards set forth in the profession of pharmacy. In addition, students must be able to obtain and maintain a valid Pharmacist Intern license in the State of Michigan and pass requisite criminal background check, drug tests/screens, immunization/tests, and trainings required by the Michigan Board of Pharmacy rules, Michigan law and/or Ferris State University College of Pharmacy affiliated experiential sites and their accrediting and/or regulatory agencies.

## Appendix 17.1

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### Doctor of Pharmacy Program Prerequisites

Requirement	Semester Hours
General Chemistry*	8
Organic Chemistry*	8
General Biology*	8
Microbiology* (Effective for candidates for the Fall, 2011 class)	3
Anatomy and Physiology	7
Calculus for the Life Sciences or Calculus	3
English Composition	6
Interpersonal Communications or Principles of Public Speaking	3
Introductory Psychology or Introductory Sociology	3
Principles of Economics (Macroeconomics)	3
Cultural Enrichment (e.g. Humanities)	9

\*General chemistry, organic chemistry, general biology, and microbiology courses must include laboratories.

## Appendix 17.2

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### Appendix 17.2 (a) Admission Criteria

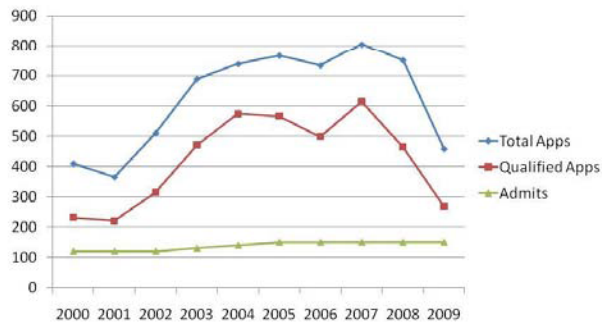
- Academic achievement in pre-pharmacy courses as reflected in GPA for individual course sequences, as well as overall;
- Pharmacy College Admission Test (PCAT);
- Results of an in-person interview, including verbal and written components (e.g. communication skills, understanding of the profession, leadership qualities, etc.);
- College of Pharmacy Technical Standards for Admission;
- Course load (e.g. average number of hours/semester, repeats, withdrawals); and
- Supplemental Application information as requested by CPAC.
- Results of a criminal background check that demonstrates the applicant does not have convictions identified in Michigan Public Acts 27, 28, and 29; or those which preclude a significant number of College of Pharmacy experiential assignments (See Section: Criminal Background Check below).  
NOTE: This is a condition of final acceptance to the program and will be conducted after initial screening of applicants and invitations to the program are extended. A criminal background check is not required as part of the online application process; however, applicants must make a disclosure as outlined in the application.

### Appendix 17.2 (b) Honor's Assurance Criteria

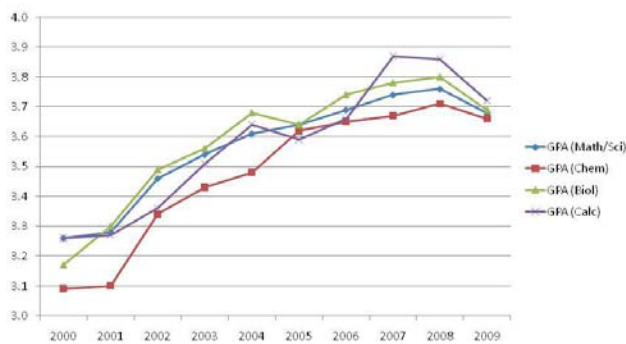
1. Maintain enrollment in the pre-pharmacy Honors Program at Ferris State University and completion of all required coursework in two years;
2. Completion of all pre-pharmacy coursework at Ferris State University following freshman admission;
3. Attainment of a GPA of at least 3.50 in biology (general biology/anatomy & physiology), chemistry (inorganic and organic) and math (calculus) pre-pharmacy coursework prior to the application deadline;
4. Earn at least a letter grade of "C" (2.0 GPA) in the biology, chemistry and mathematics pre-pharmacy coursework. (A grade below "C" (2.0 GPA) in any of the specified biology, chemistry or mathematics courses nullifies the assurance of an interview; successful repeat of a course does not restore the assurance of an interview.)
5. Attainment of a composite PCAT score in the 80th percentile or above;
6. Successfully completing (by the end of the Fall semester preceding the beginning of the academic year of the desired start date): A) All general chemistry; general biology; and calculus requirements; and B) At least one semester of organic chemistry including lab; and C) At least one semester of the anatomy/physiology including lab; and
7. Compliance with all general admissions and PCAT deadlines.

## Appendix 17.3

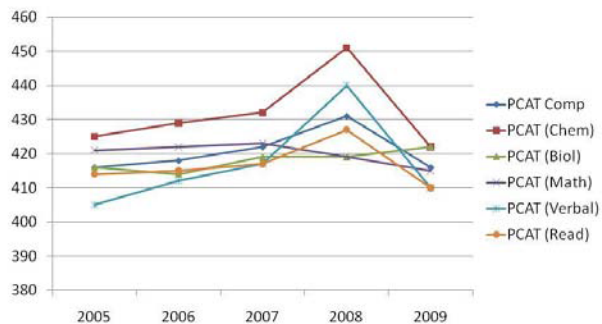
### College of Pharmacy Admission Data



### Average Pre-Pharmacy GPA



### Average PCAT Score



## Appendix 17.4

	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009*
Total Applicants	409	365	510	689	739	767	734	806	752	458
Qualified	232	221	315	471	574	566	499	615	464	269
Admitted	120	120	120	130	142	150	150	150	150	150
<b>GPA</b>	<b>3.26</b>	<b>3.28</b>	<b>3.46</b>	<b>3.54</b>	<b>3.61</b>	<b>3.64</b>	<b>3.69</b>	<b>3.74</b>	<b>3.76</b>	<b>3.68</b>
Range	2.5 – 4.0	2.5 – 4.0	2.7 – 4.0	2.6 – 4.0	3.0 – 4.0	3.2 – 4.0	3.1 – 4.0	3.2 – 4.0	3.4 – 4.0	3.1-4.0
Chemistry	3.09	3.1	3.34	3.43	3.48	3.62	3.65	3.67	3.71	3.66
Biology	3.17	3.3	3.49	3.56	3.68	3.64	3.74	3.78	3.8	3.69
Math	3.26	3.27	3.36	3.51	3.64	3.59	3.66	3.87	3.86	3.72
<b>PCAT*</b>	<b>212 (73%)</b>	<b>208 (65%)</b>	<b>216 (79%)</b>	<b>220 (83%)</b>	<b>221 (84%)</b>	<b>416 (79%)</b>	<b>418 (82%)</b>	<b>422 (86%)</b>	<b>419 (83%)</b>	<b>416 (74%)</b>
Range	158 – 249	163 – 256	181 – 260	175 – 269	185 – 285	378 – 454	389 – 451	384 – 465	401-446	401-447
Chemistry	216 (70%)	214 (68%)	223 (86%)	229 (91%)	230 (92%)	425 (85%)	429 (88%)	432 (89%)	427 (87%)	422 (77%)
Biology	215 (65%)	210 (60%)	213 (69%)	223 (80%)	223 (80%)	416 (75%)	414 (73%)	419 (78%)	418 (77%)	422 (81%)
Math	211 (61%)	212 (61%)	218 (75%)	224 (81%)	220 (77%)	421 (83%)	422 (84%)	423 (85%)	419 (81%)	415 (67%)
Verbal	208 (56%)	202 (51%)	215 (67%)	209 (61%)	215 (67%)	405 (60%)	412 (71%)	417 (77%)	414 (73%)	410 (65%)
Reading	208 (62%)	204 (55%)	212 (69%)	215 (74%)	213 (71%)	414 (71%)	415 (73%)	417 (76%)	415 (73%)	410 (65%)
FSU Students Admits <sup>†</sup>	40 (33%)	33 (28%)	39 (32%)	41 (32%)	56 (39%)	48 (32%)	67 (45%)	58 (39%)	75 (50%)	90 (60%)
Honors Stud Admits	20 (17%)	12 (10%)	20 (17%)	27 (21%)	26 (18%)	33 (22%)	40 (27%)	36 (24%)	43 (29%)	64 (43%)
External Stud Admits	80 (67%)	87 (72%)	81 (68%)	89 (68%)	86 (61%)	102 (68%)	83 (55%)	92 (61%)	75 (50%)	60 (40%)
Michigan Students	95 (79%)	99 (82%)	111 (92%)	115 (88%)	128 (90%)	130 (87%)	125 (83%)	136 (91%)	132 (88%)	141 (94%)
Non-MI Students	25 (21%)	21 (18%)	9 ( 8%)	15 (12%)	14 (10%)	20 (13%)	25 (17%)	14 ( 9%)	18 (12%)	9 (6%)
Foreign Students	18 (15%)	11 ( 9%)	3 ( 2%)	9 ( 7%)	8 ( 6%)	7 ( 5%)	9 ( 6%)	4 ( 3%)	9 (6%)	3 (2%)

## Appendix 17.5

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Results of Linear Regression of Semester GPA on Pre-Pharmacy Criteria (All Students)			
Dependent Variable	Pre-Pharmacy Predictors (Standardized Beta)	R <sup>2</sup>	Significance
Semester 1 GPA	PCAT (0.295) Chemistry GPA (0.245) Biology GPA (0.221)	0.212	p < 0.001
Semester 2 GPA	Biology GPA (0.249) Chemistry GPA (0.247) PCAT (0.243)	0.206	p < 0.001
Semester 3 GPA	Biology GPA (0.256) PCAT (0.231) Chemistry GPA (0.204)	0.182	p < 0.001
Semester 4 GPA	Biology GPA (0.300) Chemistry GPA (0.254) PCAT (0.237)	0.249	p < 0.001
Semester 5 GPA	Biology GPA (0.317) Chemistry GPA (0.222) PCAT (0.219)	0.230	p < 0.001
Semester 6 GPA	Biology GPA (0.269) Chemistry GPA (0.218) PCAT (0.204)	0.198	p < 0.001

## Appendix 17.6

### Ferris State University College of Pharmacy – Applicant Interview Document

Applicant Name: \_\_\_\_\_ Interview Start Time: \_\_\_\_\_ Interview End Time: \_\_\_\_\_

#### KNOWLEDGE OF THE PRACTICE OF PHARMACY

Evaluative Domains/Question(s)	Ratings	Applicant Response(s)
<ul style="list-style-type: none"> <li><u>Demonstrates knowledge of many areas in which pharmacists can practice</u>  <i>When you think of where a pharmacist works, what settings come to mind? Describe as many settings as you can and as detailed as possible..</i></li> </ul>	<input type="checkbox"/> <b>5:</b> Details 3 or more practice settings (i.e., retail, hospital, industry, academia, government, etc.) <input type="checkbox"/> <b>4:</b> Lists 3 or more practice settings without a lot of detail <input type="checkbox"/> <b>3:</b> Details 2 practice settings <input type="checkbox"/> <b>2:</b> Lists 1 practice setting with some detail <input type="checkbox"/> <b>1:</b> Lists or describes 1 practice setting	
<ul style="list-style-type: none"> <li><u>Verbally describes their desire to become a pharmacist</u>  <i>Why is pharmacy the right profession for you?</i></li> </ul>	<input type="checkbox"/> <b>5:</b> Relates patient care/practice related experiences <u>and</u> has familiarity with a practitioner/is modeling after a practitioner <input type="checkbox"/> <b>4:</b> Relates patient care/practice related experiences <u>or</u> has familiarity with a practitioner/is modeling after a practitioner <input type="checkbox"/> <b>3:</b> Notes pharmacy-related skills (communication skills, organization, reasoning, math/science, etc.) <u>and</u> finds it a good match for their skill set/interests <input type="checkbox"/> <b>2:</b> Notes pharmacy-related skills but does not relate it to their interests/skill set <input type="checkbox"/> <b>1:</b> Describes a reason not listed above or no reason	
<ul style="list-style-type: none"> <li><u>Verbally describes their desire to attend Ferris State University's College of Pharmacy</u>  <i>Why is Ferris the right College of Pharmacy for you? List as many reasons as you wish and why those reasons are important.</i></li> </ul>	<input type="checkbox"/> <b>5:</b> Describes >1 reasons with compelling detail (i.e., location, reputation, quality of faculty, cost, etc.) <input type="checkbox"/> <b>4:</b> Describes 1 reasons with compelling detail (i.e., location, reputation, quality of faculty, cost, etc.) <input type="checkbox"/> <b>3:</b> Describes 2 reasons without detail (i.e., location, reputation, quality of faculty, cost, etc.) <input type="checkbox"/> <b>2:</b> Describes 1 reason without much detail (i.e., location, reputation, quality of faculty, cost, etc.) <input type="checkbox"/> <b>1:</b> Does not describe a reason	



## Leadership/Teamwork

Evaluative Domains/Question(s)	Ratings	Applicant Response(s)
<ul style="list-style-type: none"> <li><u>Extensive record of significant leadership</u></li> </ul> <p><i>Describe an experience that best demonstrates your leadership abilities.</i></p>	<input type="checkbox"/> <b>5:</b> Described leading a group with emphasis on working toward a common goal. <input type="checkbox"/> <b>4:</b> Described leading a group but did not emphasize working toward a common goal. <input type="checkbox"/> <b>3:</b> Described working in a group versus leading a group <b><i>and</i></b> showed an interest in working toward a common goal. <input type="checkbox"/> <b>2:</b> Described working in a group versus leading a group with no emphasis on achieving a common goal. <input type="checkbox"/> <b>1:</b> Has had no experiences or could not clearly describe their experience.	
<ul style="list-style-type: none"> <li><u>Active participation in cooperative/teamwork</u></li> </ul> <p><i>Describe what you think makes a group work well together. If you can, please support your description with a specific example.</i></p>	<input type="checkbox"/> <b>5:</b> Demonstrates an ability to work with difficult people to accomplish a common goal <b><i>and</i></b> has experience with delegating and/or gives $\geq 2$ reasons for good group dynamics <input type="checkbox"/> <b>4:</b> Demonstrates an ability to work with difficult people to accomplish a common goal and/or gives <u>1</u> reason for good group dynamics <input type="checkbox"/> <b>3:</b> Demonstrates an ability to work on a team/can describe what makes a group work well but gives little detail <input type="checkbox"/> <b>2:</b> Chooses to avoid difficult people or just walk away <input type="checkbox"/> <b>1:</b> Avoids group work/prefers to work alone	

## Judgment and Problem-Solving

Evaluative Domains/Question(s)	Ratings	Applicant Response(s)
<ul style="list-style-type: none"> <li><u>Demonstrates self-directed problem-solving abilities</u></li> </ul> <p><i>Think of a time when you had to learn something on your own. Describe for us what it was and how you approached it.</i></p>	<input type="checkbox"/> <b>5:</b> Related their experience and explained their approach using >2 details <input type="checkbox"/> <b>4:</b> Related their experience and explained their approach using 1 detail <input type="checkbox"/> <b>3:</b> Related their experience but did not explain their approach <input type="checkbox"/> <b>2:</b> Struggled to come up with an experience <input type="checkbox"/> <b>1:</b> Has had no experiences or could not clearly describe their experience.	
<ul style="list-style-type: none"> <li><u>Can handle response to criticism/failure</u></li> </ul> <p><i>Describe a situation when someone has criticized you or your work. (Allow the applicant to respond to this question first.) Follow with:</i></p> <p><i>Tell us how you responded to it? –or– How did you handle that?</i></p>	<input type="checkbox"/> <b>5:</b> Described a situation relevant to health care or college-level learning <u>and</u> demonstrated ability to use feedback to improve self <input type="checkbox"/> <b>4:</b> Described a situation that was questionable in its relevance to health care or college-level learning <u>and</u> demonstrated ability to use feedback to improve self <input type="checkbox"/> <b>3:</b> Described a situation relevant to health care or college-level learning but did not demonstrate ability to use feedback to improve self <input type="checkbox"/> <b>2:</b> Described a situation that was questionable in its relevance to health care or college-level learning but did not demonstrate ability to use feedback to improve self <input type="checkbox"/> <b>1:</b> Could not provide a situation/response and/or was defensive or blaming to another individual	

## Service Orientation and Commitment of Patient Care

Evaluative Domains/Question(s)	Ratings	Applicant Response(s)
<ul style="list-style-type: none"> <li><u>Routinely participates in meeting the needs of another</u></li> </ul> <p><i>Describe a situation (preferably healthcare related) when you did something for someone else to help them deal with a difficult situation.</i></p>	<p><input type="checkbox"/> 5: Describes situation/experience using many details <i>and</i> situation/experience was healthcare related</p> <p><input type="checkbox"/> 4: Describes situation/experience using many details but only describes non-healthcare related situation</p> <p><input type="checkbox"/> 3: Listed a situation but did not provide many details</p> <p><input type="checkbox"/> 2: Struggled to come up with an experience</p> <p><input type="checkbox"/> 1: Has had no experiences or could not clearly describe their experience.</p>	
<ul style="list-style-type: none"> <li><u>Participates in and contributes to their community</u></li> </ul> <p><i>Describe one or more situations where you worked with someone with a background different from your own to resolve a problem, complete a project or goal, or address a question they may have had.</i></p> <p><i>Follow up with any of these: What was the experience like for you? What did you gain from the experience? How did you handle that?</i></p>	<p><input type="checkbox"/> 5: Describes &gt;1 experiences with different populations <i>and</i> displays a sensitivity for different groups</p> <p><input type="checkbox"/> 4: Describes 1 experiences with different populations <i>and</i> displays a sensitivity for different groups</p> <p><input type="checkbox"/> 3: Has little to no experiences with different populations <i>but</i> displays a sensitivity for different groups</p> <p><input type="checkbox"/> 2: Has little to no experience with different populations and seems closed minded to different groups</p> <p><input type="checkbox"/> 1: Could not clearly describe their feelings or experiences.</p>	
<ul style="list-style-type: none"> <li><u>Provides a meaningful balance in the breadth and depth of chosen activities</u></li> </ul> <p><i>What are your favorite things to do outside of the classroom?</i></p>	<p><input type="checkbox"/> 5: Describes 3 or more things using examples</p> <p><input type="checkbox"/> 4: Lists 3 or more things</p> <p><input type="checkbox"/> 3: Describes 2 things using examples</p> <p><input type="checkbox"/> 2: Lists 2 things or describes 1 thing with an example</p> <p><input type="checkbox"/> 1: Lists 1 thing or cannot think of anything</p>	

**Communication Skills**

Evaluative Domains/Question(s)	Ratings	Applicant Response(s)
<ul style="list-style-type: none"> <li><u>Demonstrates ability to teach the use of a device</u> <b><u>This is my final question.</u></b> <i>Pharmacists are frequently in a situation where they need to teach patients. I would like you to imagine you are teaching this to someone who is doing it for the first time:</i> <ul style="list-style-type: none"> <li>SELECT SOMETHING FROM THEIR INTEREST ABOVE</li> <li>Make a peanut butter and jelly sandwich</li> <li>Parallel park a car.</li> </ul> </li> </ul> <p><b><u>THAT COMPLETES THE QUESTIONS I</u></b></p>	<p><input type="checkbox"/> <b>5:</b> Describes the process using many details in a step by step format (first, next, then, finally.....)</p> <p><input type="checkbox"/> <b>4:</b> Describes the process using a few details in a step by step format (first, next, then, finally.....)</p> <p><input type="checkbox"/> <b>3:</b> Describes the process using many details but skips around a bit</p> <p><input type="checkbox"/> <b>2:</b> Describes the process using a few details and skips around a bit</p> <p><input type="checkbox"/> <b>1:</b> Unable to clearly describe the process</p> <p><b><u>HAVE FOR YOU. DO YOU HAVE ANY</u></b></p>	<p><b><u>QUESTIONS YOU WOULD LIKE TO ASK ME?</u></b></p>
<ul style="list-style-type: none"> <li><u>Use of English/Speaking skills</u> <i>Obtained from answers to questions – this is a general, overall impression</i></li> </ul>	<p><input type="checkbox"/> <b>5:</b> Fluid conversation with rare pauses, maintains good eye contact, and has few to no grammatical errors when speaking</p> <p><input type="checkbox"/> <b>4:</b> Some halting speech but not distracting, maintains good eye contact most of the time, and has few to no grammatical errors when speaking</p> <p><input type="checkbox"/> <b>3:</b> Often stops and spends lots of time looking for words, maintains good eye contact some of the time, and has some grammatical errors when speaking</p> <p><input type="checkbox"/> <b>2:</b> Has difficulty speaking English but is able to communicate information</p> <p><input type="checkbox"/> <b>1:</b> Has difficulty speaking English, rarely maintains eye contact and/or has many grammatical errors..</p>	
<ul style="list-style-type: none"> <li><u>Quality of responses</u> <i>Obtained from answers to questions – this is a general, overall impression</i></li> </ul>	<p><input type="checkbox"/> <b>5:</b> All of the candidate’s responses are thoughtful, substantive, and well-reasoned</p> <p><input type="checkbox"/> <b>4:</b> Most of the candidate’s responses are thoughtful, substantive, and well-reasoned</p> <p><input type="checkbox"/> <b>3:</b> Some of the candidate’s responses are thoughtful, substantive, and well-reasoned</p> <p><input type="checkbox"/> <b>2:</b> A few of the candidate’s responses are thoughtful, substantive, and well-reasoned</p> <p><input type="checkbox"/> <b>1:</b> None of the responses were substantive and well-reasoned</p>	

## Appendix 17.7a

Statistical Analysis of NAPLEX® Passing Rates for First-time Candidates per Pharmacy School from 2005 to 2009

The following table indicates the passing percentages for the first time NAPLEX candidates who were graduates from ACPE-accredited United States schools and colleges of pharmacy between 2005 and 2009. This data may be useful to the state boards of pharmacy as well as the schools and colleges of pharmacy.

School	Candidates	2005	Candidates	2006	Candidates	2007	Candidates	2008	Candidates	2009	Candidates	Total
Albany College of Pharmacy	103	94.17%	107	96.26%	126	98.41%	189	96.30%	200	96.00%	725	96.28%
Auburn University	89	95.51%	109	92.66%	114	96.49%	125	99.14%	111	99.10%	548	96.70%
Butler University	84	98.81%	97	97.94%	147	96.60%	156	100.00%	129	98.45%	613	98.37%
Campbell University	96	94.79%	87	95.40%	107	97.20%	102	99.02%	101	100.00%	493	97.36%
Creighton University	143	83.92%	158	86.08%	161	96.89%	154	98.70%	159	100.00%	775	93.29%
Drake University	101	94.06%	106	95.28%	127	96.06%	121	98.35%	134	98.51%	589	96.61%
Duquesne University	123	90.24%	116	84.48%	137	94.16%	164	94.51%	193	95.85%	733	92.50%
Ferris State University	113	92.04%	115	95.65%	112	100.00%	146	98.63%	128	96.88%	614	96.74%
Florida A&M University	122	88.52%	124	83.06%	109	93.58%	145	87.59%	116	81.90%	616	86.85%
Hampton University	38	78.95%	43	86.05%	49	93.88%	51	88.24%	47	89.36%	228	87.72%
Howard University	62	53.23%	75	82.67%	81	92.59%	89	94.38%	94	88.30%	401	84.04%
Idaho State University	53	96.23%	52	94.23%	56	98.21%	55	100.00%	59	98.31%	275	97.45%
Lake Erie College of Osteopathic Medicine School of Pharmacy	70	71.43%	81	91.36%	108	88.89%	131	96.95%	123	96.75%	513	90.84%
Lebanese American University	19	94.74%	19	100.00%	13	100.00%	19	100.00%	20	75.00%	90	93.33%
Loma Linda University			32	96.88%	37	100.00%	53	98.11%	56	96.43%	178	97.75%
Long Island University	180	87.22%	171	76.61%	195	84.10%	212	92.45%	211	87.68%	969	85.96%
Massachusetts College of Pharmacy, Boston	225	83.11%	165	85.45%	240	91.67%	269	91.45%	259	93.05%	1158	89.38%
Massachusetts College of Pharmacy, Worcester	91	83.52%	125	90.40%	161	96.27%	65	96.92%	158	94.94%	600	92.83%
Medical University of South Carolina	61	91.80%	73	95.89%	73	95.89%	79	97.47%	79	97.47%	365	95.89%
Mercer University	142	86.62%	126	92.86%	139	97.84%	130	99.23%	136	99.26%	673	95.10%
Midwestern University Chicago	143	91.61%	200	86.50%	198	91.92%	203	96.55%	194	95.88%	938	92.54%
Midwestern University-Glendale	123	93.50%	124	93.55%	131	96.18%	128	95.31%	137	97.08%	643	95.18%
North Dakota State University	64	92.19%	87	96.55%	83	96.39%	86	96.51%	85	98.82%	405	96.30%
Northeastern University	71	88.73%	99	87.88%	95	92.63%	108	95.37%	118	95.76%	491	92.46%
Nova Southeastern University	156	91.67%	211	87.68%	213	92.49%	210	94.76%	227	87.22%	1017	90.66%
Ohio Northern University	94	91.49%	112	94.64%	156	98.72%	178	98.31%	162	98.77%	702	97.01%
Ohio State University	97	98.97%	118	96.61%	111	100.00%	110	99.09%	123	98.37%	559	98.57%
Oregon State University	65	96.92%	76	98.68%	74	100.00%	72	100.00%	83	95.18%	370	98.11%

Empty cells are due to universities not having a graduating class for that time period.

Released by the National Association of Boards of Pharmacy® on February 18, 2010.

## Appendix 17.7b

Statistical Analysis of MPJE® Passing Rates for First-time Candidates per Pharmacy School from 2007-2009

The following table indicates the passing percentages for first time MPJE candidates who were graduates from ACPE-accredited United States schools and colleges of pharmacy in 2007, 2008, and 2009. The data only reflects data from students that took the exam for the state that their university resides in. This data may be useful to the state boards of pharmacy as well as the schools and colleges of pharmacy.

School	Candidates	2007	Candidates	2008	Candidates	2009	Candidates	Total
Albany College of Pharmacy	71	90.14%	124	94.35%	146	93.84%	341	93.25%
Auburn University	82	93.90%	106	92.45%	78	94.87%	266	93.61%
Butler University	89	97.75%	120	99.17%	99	98.99%	308	98.70%
Campbell University	86	96.51%	86	98.84%	88	95.45%	260	96.92%
Creighton University	43	97.67%	58	98.28%	57	98.25%	158	98.10%
Drake University	53	98.11%	68	95.59%	60	95.00%	181	96.13%
Duquesne University	89	96.63%	129	96.90%	155	96.13%	373	96.52%
Ferris State University	97	95.88%	136	95.59%	107	93.46%	340	95.00%
Florida A&M University	84	94.05%	120	89.17%	104	88.46%	308	90.26%
Howard University	12	75.00%	28	57.17%	31	80.65%	71	70.43%
Idaho State University	35	94.29%	38	100.00%	49	97.96%	122	97.54%
Lake Erie College of Osteopathic Medicine School of Pharmacy	53	98.11%	61	96.72%	50	98.00%	164	97.56%
Long Island University	118	92.37%	172	91.28%	181	90.61%	471	91.30%
Massachusetts College of Pharmacy, Boston	86	89.53%	172	83.14%	152	89.47%	410	86.83%
Massachusetts College of Pharmacy, Worcester	53	100.00%	64	95.31%	51	94.12%	168	96.43%
Medical University of South Carolina	57	100.00%	63	98.41%	56	100.00%	176	99.43%
Mercer University	99	100.00%	94	97.87%	101	98.02%	294	98.64%
Midwestern University Chicago	170	94.71%	172	93.02%	176	96.59%	518	94.79%
Midwestern University-Glendale	93	97.85%	93	97.85%	85	97.65%	271	97.79%
North Dakota State University	30	96.67%	42	90.48%	38	100.00%	110	95.46%
Northeastern University	64	90.63%	65	89.23%	71	90.14%	200	90.00%
Nova Southeastern University	188	94.68%	185	94.59%	186	93.01%	559	94.10%
Ohio Northern University	123	98.37%	144	98.61%	131	100.00%	398	98.99%
Ohio State University	96	100.00%	87	100.00%	83	98.80%	266	99.62%
Oregon State University	56	94.64%	83	86.75%	79	94.94%	218	91.74%
Palm Beach Atlantic University	70	87.14%	56	87.50%	45	93.33%	171	88.89%
Philadelphia College of Pharmacy	101	80.20%	143	83.22%	126	90.48%	370	84.87%
Purdue University	108	97.22%	134	98.51%	135	97.04%	377	97.61%
Rutgers State University of New Jersey	164	95.73%	221	92.31%	238	93.70%	623	93.74%
Samford University	76	96.05%	76	94.74%	83	97.59%	235	96.17%
South University	39	97.44%	45	95.56%	49	93.88%	133	95.49%

Pharmacy schools that reside in states that do not participate in the MPJE® program are not shown.

Released by the National Association of Boards of Pharmacy® on February 18, 2010.

## Appendix 18.1

### Ferris State University College of Pharmacy Doctor of Pharmacy Curriculum

Professional Year 1 – Fall Semester		Cr	Grade	Professional Year 3 – Fall Semester		Cr	Grade
PHAR 311: Medical Biochemistry	3			PHAR 540: Drug Lit Evaluation/Research Methods	3		
PHAR 334: Pharmacy and Health Care in the US	3			PHAR 511: Pharmacotherapeutics 1	4		
PHAR 315: Pathophysiologic Basis for Therapeutics 1	3			PHAR 512: Pharmacotherapeutics 2	3		
PHAR 318: Drug Delivery 1	3			PHAR 585: Practice Skills Lab 5	1		
PHAR 335: Clinical Communications	2			PHAR 535: Sociopharmacy and Professional Ethics	3		
PHAR 385: Practice Skills Lab 1	1			PHAR 591: Longitudinal Patient 2 IPPE	0.5		
PHAR 328: Pharmaceutical Calculations	1						
<b>Semester GPA</b>		<b>16</b>		<b>Semester GPA</b>		<b>14.5</b>	
Professional Year 1 – Spring Semester		Cr	Grade	Professional Year 3 – Spring Semester		Cr	Grade
PHAR 312: Molecular Biochemistry & Biotechnology	3			PHAR 525: Pharmacy Practice Management 2	3		
PHAR 340: Nonprescription Medicine and Self-Care	3			PHAR 530: Pharmacy Law	2		
PHAR 316: Pathophysiologic Basis for Therapeutics 2	3			PHAR 513: Pharmacotherapeutics 3	3		
PHAR 319: Drug Delivery 2	4			PHAR 514: Pharmacotherapeutics 4	3		
PHAR 386: Practice Skills Lab 2	1			PHAR 586: Practice Skills Lab 6	1		
English 321/421	3			PHAR 589: Integrated Case Studies	2		
				PHAR 591: Longitudinal Patient 2 IPPE	0.5		
<b>Semester GPA</b>		<b>17</b>		<b>Semester GPA</b>		<b>14.5</b>	
Professional Year 1 – Summer Semester		Cr	Grade	Electives: Must be completed prior to 4 <sup>th</sup> year.		Cr	Grade
PHAR 393: Community IPPE	2			Pharmacy Elective 1	2		
				Pharmacy Elective 2	2		
Professional Year 2 - Fall Semester		Cr	Grade	Professional Year 4		Cr	Grade
PHAR 428: Pharmacokinetics	3			PHAR 680: Clinical Seminar	0.5		
PHAR 421: Infectious Disease 1	3*			PHAR 680: Clinical Seminar	0.5		
PHAR 411: Drug Action 1	4			PHAR 600: Internal Medicine 1 APPE	4		
PHAR 412: Drug Action 2	4			PHAR 601: Internal Medicine 2 APPE	4		
PHAR 485: Practice Skills Lab 3	1			PHAR 602: Ambulatory Care 1 APPE	4		
PHAR 491: Longitudinal Patient 1 IPPE	0.5			PHAR 603: Ambulatory Care 2 APPE	4		
<b>Semester GPA</b>		<b>15.5</b>		PHAR 610: Institutional Practice APPE	4		
Professional Year 2 - Spring Semester		Cr	Grade	PHAR 611: Community Pharmacy APPE	4		
PHAR 413: Drug Action 3	4			APPE Elective – PHAR _____	4		
PHAR 414: Drug Action 4	4			APPE Elective – PHAR _____	4		
PHAR 486: Practice Skills Lab 4	1			APPE Elective – PHAR _____	4		
PHAR 422: Infectious Disease 2	3			<b>(37 Hours Total) 1<sup>st</sup> Semester GPA</b>			
PHAR 425: Pharm Practice Mngment 1	3			Cumulative GPA			
PHAR 491: Longitudinal Patient 1 IPPE	0.5			2 <sup>nd</sup> Semester GPA			
<b>Semester GPA</b>		<b>15.5</b>		Cumulative GPA			
Professional Year 2 – Summer Semester		Cr	Grade	<b>Total Hours for Graduation</b>		<b>138</b>	
PHAR 493: Institutional IPPE	2						

**Began Program:** \_\_\_\_\_

**Graduation Date:** \_\_\_\_\_

**Honors Received:**

\*This course will be 4-credits until the microbiology pre-pharm changes take effect for students entering this sequence.

**Electives:**

- PHAR 451: Institutional Pharmacy
- PHAR 453: Topics in Nutritional Biochemistry
- PHAR 450: Introduction to Public Health
- PHAR 455: Current Controversies in Health Care
- PHAR 457: Introduction to Pharmacy Law & Ethics
- PHAR 463: Botanical Supplements and Alternative Therapies
- PHAR 464: Natural Product Toxins
- PHAR 466: Research Elective in Medicinal Chemistry
- PHAR 468: Selected Topics in Medicinal Chemistry
- PHAR 470: Pharmacy and Geriatric Health
- PHAR 551: Managed Care Pharmacy Practice
- PHAR 552: Advanced Topics in Infectious Diseases
- PHAR 553: Palliative Care
- PHAR 554: Complementary and Alternative Medicine for the Clinical
- PHAR 556: Application of Patient-Focused Care in Community Pharmacy
- PHAR 558: Medical Research: Methods and Design
- PHAR 559: Interdisciplinary Community Practicum
- PHAR 560: Advance Cardiac Life Support
- PHAR 563: Special Populations: Pediatrics and Geriatrics

**Electives – Advance Pharmacy Practice Experiences:**

- PHAR 617: Hospital Pharmacy Admin APPE
- PHAR 618: Managed Care APPE
- PHAR 626: Veterinary Medicine APPE
- PHAR 628: Nuclear Pharmacy APPE
- PHAR 650: Special Topics in Inpatient Medicine APPE
- PHAR 655: Special Topics in Ambulatory Care APPE
- PHAR 666: International Pharmacy APPE
- PHAR 662: Pharmaceutical Industry APPE
- PHAR 661: Corporate Pharmacy APPE
- PHAR 663: Health System Pharmacy APPE



## Appendix 18.2

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### Ferris State University Course Competency Assessment and Testing Policy

Competency Assessment is one of the credit-by-examination options offered to students who wish to demonstrate proficiency in courses offered through the University. It can be comprised of a single or multiple instruments including classroom proficiency examinations, portfolios, or performance assessments/ projects. Faculty in the appropriate course, program, or department determines the method of assessing courses eligible for competency assessment.

Those students completing Course Competency Assessment and meeting the standards required for a grade of “C” or higher will earn credit for the course. Credit granted on the basis of a course competency assessment is entered on a student’s record without a grade and is not included in the computation of the Ferris grade point average (GPA) or graduation honors.

A student may take a Course Competency Assessment for any course a maximum of two times.

Prerequisites must be met before Course Competency Assessment may be considered for any course.

Credit normally will not be awarded for any course for which the student has already earned credit or for courses below the level of a course for which the student already has credit.

Courses such as lab science courses, workshops, special topics, seminars and directed or independent studies are excluded from Course Competency Assessment. Academic departments may exclude certain courses from Course Competency Assessment.

## Appendix 19.1

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### Dismissals/Appeals and Attrition

Entering Class Year	Dismissal	Reinstated on Appeal	Reinstated and Progressed Successfully	Withdrawal	Total Attrition
2004	6	4	2	0	4
2005	6	1	1	1	6
2006	1	0	0	6	7
2007	8	4	2	4	9
2008	3	2	1	4	6
2009	3	1	In progress	2	4

## Appendix 24.1

### COP Faculty and Staff (As of July 1, 2010)

**Table 1: Pharmaceutical Science Faculty**

Last name	First name	Rank	Degree / Additional training	Courses taught  PHAR = 2009 Curriculum (PHPR/Other = 2000 Curriculum)
Bates	Jeffrey	Tenured, Assistant Professor	B.S. Pharmacy, PharmD  CGP -- Commission for Certification in Geriatric Pharmacy	PHAR 334, 335, 340, 470 (PHPR 411, 412, 472, 605)
Bennett	David	Non-Tenured, Assistant Professor	B.S. Pharmacy, Ph.D., MSA	PHAR 525, 535 (PHAD: 436, 502)
Boncher	Tracey	Tenured, Assistant Professor	Ph.D.	PHAR 311, 411, 412, (PHCH 452)
Dakkuri*	Adnan	Tenured, Professor	B.S. Pharmacy, Ph.D.	PHAR 318, 319, 462 (PHAR 325, 326, PHCH 462)
Hancock	Kim	Tenured, Professor	B.S. Pharmacy, Ph.D.	PHAR 319, 428 (PHAR 326, 440)
Hult	Richard	Tenured, Professor	B.S. Pharmacy, Ph.D.	PHAR 411, 412, 413, 414 (PHCL 423, PHCH 427, PHCL 424, PHCH 428)
Krueger	Robert	Tenured, Professor	B.S. Pharmacy, Ph.D.	PHAR 340, 412, 413, 414, 421, 422, 452, 462 (PHCH 427, 428, 430, 523; PHCL 424, PHCG 452, PHCG 462)
Lovested	Elsie	Tenured, Professor	B.S. Pharmacy, Ph.D.	PHAR: 411, 412, 413, 414 (PHCH 427, 428, 430, 462)
McMullen	Kenneth	Instructor	BIS, B.S. Pharmacy	PHAR 328, 385, 386 (PHPR 303, 304)
Miskimins Mills	Beth	Non-Tenured, Assistant Professor	Ph.D.	PHAR 311, 312 (PHCH 320)
Ngoh	Lucy	Tenured, Associate Professor	B.S. Pharmacy, MHA, Ph.D.	PHAR: 482, 484; SOCY 373 (PHAD: 310, 424, 482, 484, 502, 520)
Potter	Gregory	Tenured, Professor	B.S. Pharmacy, Ph.D.	PHAR 315, 316, 485, 486 (PHPR 411, 412; PHCL 352, 423, 424) OPTM 638

\*Dual role as Department Chair

**Table 2: Pharmacy Practice Faculty**

Last name	First name	Rank	Degree Additional training	Practice Site, City <b>APPE Experience(s)</b> <b>[E = Elective]</b> Courses taught PHAR = 2009 Curriculum (PHPR/Other = 2000 Curriculum)
Bailey	Teresa	Tenured, Professor	B.S. Pharmacy, Pharm.D. Pharmacy Practice Residency, Family Practice Residency	ProMed Family Practice, Portage <b>Ambulatory Care PHAR: 602, 603</b> <b>(PHPR 602, 603)</b> PHAR: 511, 512, 513, 514, 335, 680 (PHPR 514, 521, 522, 523, 524, 680) PHCG 432
Bernknopf	Allison	Tenured, Associate Professor	Pharm.D. Drug Information Residency BCPS	MSU/KCMS, Kalamazoo <b>Drug Information [E] PHAR 606</b> <b>(PHPR 606)</b> PHAR 540, 680 (PHPR 550, 680)
Bouthillier*	Michael	Non-Tenured, Associate Professor	B.S. Pharmacy, Pharm.D. Pharmacy Practice Residency	Spectrum Health Academic Medical Association, Grand Rapids <b>Ambulatory Care PHAR 602, 603</b> <b>(PHPR 602, 603)</b> PHAR: 335, 511, 512, 585, 586, 680 (PHPR: 501, 502, 514, 521, 522, 680) PHAD 310
Covyeou	Jill	Non-Tenured, Assistant Professor	Pharm.D. Pharmacy Practice Residency	Family & Child Health Clinic, Essexville <b>Ambulatory Care PHAR 602, 603</b> <b>(PHPR 602, 603)</b> PHAR 511,512, 513, 514, 585, 586, 680 (PHPR 501, 502, 521, 522, 523, 524, 680)
DeHoag	Cambria	Tenured, Professor	Pharm.D. Pharmacy Practice Residency	G-500 MERC, Grand Rapids <b>Experiential Coordinator</b> PHAR 511, 512, 513, 514, 585, 586, 680 (PHPR 501, 502, 514, 521, 522, 523, 524, 680)

De Voest (0.6 FTE)	Margaret	Tenured, Associate Professor	Pharm.D. Pharmacy Practice Residency	Spectrum Health Butterworth Campus, Grand Rapids <b>Internal Medicine PHAR 600, 601 (PHPR 600, 601)</b> PHAR 585, 576, 680 (PHPR 501, 576, 680)
Elder	Jodie	Non-Tenured, Assistant Professor	Pharm.D. Pharmacy Practice Residency BCPS	Metro Health Breton, Grand Rapids <b>Ambulatory Care PHAR 602, 603 (PHPR 602, 603)</b> PHAR 513, 586, 680 (PHPR 502, 523, 680)
Hagerman	Jennifer	Tenured, Associate Professor	Pharm.D. Pharmacy Practice Residency AE-C	Hurley Medical Center, Flint <b>Internal Medicine PHAR 600, 601 (PHPR 600, 601)</b> PHAR 511, 512, 513, 514, 585, 586, 680 (PHPR 501, 502, 521, 522, 523, 524, 680)
Hanson	Kierstan	Non-Tenured, Assistant Professor	B.A. Physiology, Pharm.D. Pharmacy Practice Residency BCPS	MSU Clinical Center, East Lansing <b>Ambulatory Care PHAR 602, 603 (PHPR 602, 603)</b> PHAR 511, 512, 513, 514, 585, 586, 680 (PHPR 510, 502, 521, 522, 523, 524, 680)
Jameson	John	Tenured, Professor	B.S. Pharmacy Pharm.D. BCPS	Wege Center, Grand Rapids <b>Ambulatory Care PHAR 602, 603 (PHPR 602, 603)</b> PHAR 334, 335, 511, 512, 513, 514, 680 (PHPR 514, 521, 522, 523, 524, 6 80; PHAD 310)
Klepser	Michael	Tenured, Professor	Pharm.D. Pharmacy Pracice Residency, Fellowship (ID)	FSU COP Spindler Hall, Kalamazoo <b>Academic Pharmacy Experience PHAR 605 (PHPR 605)</b> PHAR 513, 556, 680 (PHPR 523, 556, 680)
Koski	Renee	Tenured, Professor	B.S. Pharmacy, Pharm.D. Pharmacy Practice Residency CACP	UPHEC, Marquette <b>Ambulatory Care PHAR 602, 603 (PHPR 602, 603)</b> PHAR 511, 512, 513, 514, 585, 586, 680 (PHPR 501, 502, 521, 522, 523, 524, 680)

Lee	Stephen	Tenured, Associate Professor	M.S. Pharmacology, Pharm.D., Pharmacy Practice Residency	St. Mary's Healthcare, Grand Rapids <b>Internal Medicine PHAR 600, 601 (PHPR 600, 601)</b> <b>Infectious Disease PHAR 648 (PHPR648)</b> <b>Special Topics Inpatient Medicine [E] PHAR 650 (PHPR 650)</b> PHAR 315, 316, 511, 512, 513, 514, 585, 586, 680 (PHPR 501, 502, 521, 522, 523, 524, 680)
Meny	Lisa	Non-tenured, Assistant Professor	Pharm.D. Pharmacy Practice Residency – Community Practice	G-500 MERC, Grand Rapids <b>IPPE Coordinator PHAR 625 (PHPR 625)</b> PHAR 554, 680 (PHPR 554, 680)
Mersfelder	Tracey	Tenured, Associate Professor	B.S. Pharmacy, Pharm.D., Pharmacy Practice Residency, Internal Medicine Residency, BCPS	Borgess Medical Center, Kalamazoo <b>Internal Medicine PHAR 600, 601 (PHPR 600, 601)</b> PHAR 511, 512, 513, 514, 585, 586, 680 (PHPR 501, 502, 521, 522, 523, 524, 680)
Morse (0.5 FTE)	Jacqueline	Non-tenured, Assistant Professor	Pharm.D. Pharmacy Practice Residency - Community Practice, BCPS	G-500 MERC, Grand Rapids <b>Community Pharmacy PHAR 611 (PHPR 611)</b> PHAR 334, 335, 349, 566, (PHPR 501, 502, 524, 680 PHAD 310)
Neinhuis (0.5 FTE)	Marc	Tenured, Associate Professor	B.S. Pharmacy, Pharm.D.	Bay Regional Medical Center, Bay City <b>Internal Medicine PHAR 600, 601 (PHPR 600, 601)</b> PHAR 511, 512, 513, 514, 585, 586, 680 (PHPR 501, 502, 521, 522, 523, 524, 680)
Raguckas	Sarah	Tenured, Associate Professor	B.S. Biomedical Science, Pharm.D. Pharmacy Practice Residency	Michigan Medical. PC, Grand Rapids <b>Ambulatory Care PHAR 602, 603 (PHPR 602, 603)</b> PHAR 385, 554, 680 (PHPR 554, 562, 680)

Ross	Mary Frances	Tenured, Professor	B.S. Pharmacy, Pharm.D., Pharmacy Practice Residency	Family Health Center, Kalamazoo <b>Ambulatory Care PHAR 602, 603 (PHPR 602, 603)</b> PHAR 680 (PHPR 514, PHPR 680)
Rowley	Kristina	Non-tenured, Assistant Professor	Pharm.D. Pharmacy Practice Residency, Ambulatory Care Residency, CDE	MSU/KCMS, Kalamazoo <b>Ambulatory Care PHAR 602, 603 (PHPR 602, 603)</b> PHAR 511, 512, 513, 514, 585, 586, 680 (PHPR 501, 502, 521, 522, 523, 524, 680)
Saadeh	Claire	Tenured, Associate Professor	B.S. Pharmacy, Pharm.D. Pharmacy Practice Residency, Oncology Residency, BCOP	Sparrow Health System, Lansing <b>Pain Management [E], Oncology [E] PHAR 619, 652 (PHPR 619, 652)</b> PHAR 511, 513, 585, 586, 680 (PHPR 501, 502, 521, 523, 558, 680)
Schulz	Kali	Non-Tenured, Assistant Professor	Pharm.D. Pharmacy Practice Residency, BCPS	Saint Mary's Health Care, Grand Rapids <b>Internal Medicine PHAR 600, 601 (PHPR 600, 601)</b> PHAR 513, 514, 585, 586, 680 (PHPR 501, 502, 514, 523, 524, 556, 680)
Smith	Curtis	Tenured, Professor	B.S. Pharmacy, Pharm.D., Fellowship (Pharmacokinetics), BCPS	Sparrow Health System, Lansing <b>Internal Medicine, Clinical Pharmacokinetics [E], Trauma Care [E], Critical Care [E] PHAR 600, 601, 604, 623, 624 (PHPR 600, 601, 604, 623, 624)</b> PHAR 511, 513, 585, 586, 680 (PHPR 501, 502, 514, 521, 523, 680)
Straley	Craig	Tenured, Professor	B.S. Pharmacy, Pharm.D. Fellowship (Psychiatry), BCPP	VA Medical Center, Battle Creek <b>Psychiatry [E] PHAR 640 (PHPR 640)</b> PHAR 511, 585, 680 (PHPR 501, 514, 521, 680)
Thill	Paul	Tenured, Associate Professor	Pharm.D. Pharmacy Practice Residency	Covenant Health Care, Saginaw <b>Internal Medicine PHAR 600, 601 (PHPR 600, 601)</b> PHAR 511, 512, 585, 586, 680 (PHPR 501, 502, 521, 522, 582, 680)

VandenBussche	Heather	Tenured, Professor	Pharm.D. Pharmacy Practice Residency , Pediatric Residency	Bronson Methodist Hospital, Kalamazoo <b>Pediatric Medicine [E] PHAR 608 (PHPR 608)</b> PHAR 513, 514, 586, 680 (PHPR 502, 523, 524, 556, 582, 680)
Van Loo	Dean	Tenured, Associate Professor	Pharm.D. Pharmacy Practice Residency	Bronson Methodist Hospital, Kalamazoo <b>Internal Medicine, Infectious Disease [E], Academic Pharmacy Experience[E] PHAR 600, 601, 648, 605 (PHPR 600, 601, 648, 605)</b> PHAR 385, 511, 512, 513, 514, 585, 576, 680 (PHPR 501, 502, 521, 522, 523, 524, 680)
Campbell	Sandra	Adjunct – Contractual**	Pharm.D.	Sparrow Family Practice Clinic Lansing <b>Ambulatory Care PHAR 602, 603 (PHPR 602, 603)</b> PHAR 511, 512, 513, 514, 585, 586, 680 (PHPR 501, 502, 521, 522, 523, 524, 680)

\*Dual role as Department Chair

\*\*Service contract with Michigan State University Clinical Center



**Table 3: Administration**

<b>Last name</b>	<b>First name</b>	<b>Location</b>	<b>Degree, Additional Training, Area or responsibility</b>
Baran	Rose	Grand Rapids	B.S. Pharmacy, M.A. Business Admin Practicum Director
Durst	Stephen	Kalamazoo /Grand Rapids	B.S. Pharmacy, Pharm.D. Associate Dean
Mathison	Ian	Big Rapids	B.Pharm., Ph.D., D.Sc. Dean
Wellman	Gregory	Big Rapids	B.S. Biology; B.S. Pharmacy, M.S. Hospital Pharmacy, PhD Pharmacy Administration; Residency in Hospital Pharmacy Assistant Dean of Student Affairs & Assessment

**Table 4: Support Staff**

<b>Last name</b>	<b>First name</b>	<b>Location</b>	<b>Degree, Additional Training, Area or responsibility</b>
Jorgenson	Emily	Kalamazoo	A.S. Dental Technology B.S. Recreation Management and Leisure Services Administrative Assistant
Lee	Tara	Big Rapids	B.S. Business Admin. Administrative Specialist-Admissions
Lyons	Margaret	Grand Rapids/Kalamazoo	M.A. College Counseling, L.P.C. Director of Off-Campus Student Services
Maguire	Patricia	Big Rapids	B.S. Accountancy CPA Account Clerk
Ruggles	Andrea	Big Rapids	A.S. Pre-Teaching/Paralegal Administrative Specialist-Continuing Education
Saunders	Melissa	Big Rapids	Clerical
Seiferlein	Mandy	Grand Rapids	B.A., M.P.A. Health Care Admin. Director of External Clinical Operations
Wiese	Terry	Grand Rapids	Administrative Assistant

**Table 5: Information Technology (IT) Support**

Last name	First name	Location	Area or responsibility
Flowers (0.5 FTE)	Tony	Grand Rapids	IT Support
Mishler	Russell	Big Rapids	IT Support
Pavlov (0.2 FTE)	Velislav	Grand Rapids	IT Support
Todd (0.5 FTE)	David	Kalamazoo	IT Support

**Table 6: Open Faculty Positions**

Position Number	FTE	Status (as of July 1, 2010)
21537	1.0	Posted - Practice Skills Lab III & IV; Social and Administrative Sciences (Pharmaceutical Sciences)
21560	1.0	To be posted (open 6/1/10) (Pharmacy Practice)
21504	1.0	Posted - General Adult Medicine (Pharmacy Practice)
21516	1.0	Posted – General Adult Medicine (Pharmacy Practice)
21540	1.0	To be posted – General Adult Medicine (Pharmacy Practice)
21507	1.0	Practicum Director – to be reassigned from temporary position (Pharmacy Practice)
21512	1.0	Contractually filled with adjunct; Ambulatory Medicine (Pharmacy Practice)

## Appendix 24.2

### Experiential Sites

#### Preceptor Licensure Status

Each College of Pharmacy-selected experiential preceptor is licensed by his/her respective state's Board of Pharmacy. Licensure status is verified prior to assignment as preceptor and is reviewed annually. Additionally, each experiential site utilized by the College is licensed by all necessary boards and/or agencies.

#### Interaction with Other Health Professional Students and Practitioners

Although non-pharmacist healthcare professionals may assist in the experiential instruction of students, the vast majority of primary preceptors are registered pharmacists. There are a small number of non-pharmacist preceptors, including College of Pharmacy basic science faculty members, who precept specific elective experiences such as Academics.

#### Site Affiliation Agreements

All faculty-supported experiential sites have affiliation agreements on file with the College of Pharmacy's Director of External Clinical Operations. Approximately 80% of adjunct faculty-supported experiential sites currently utilized have affiliation agreements on file.

#### Faculty-Supported APPE Sites

Location	Experience	Practice Site	Faculty Member	Student-Months Precepted July 09-June 10
Kalamazoo	Ambulatory Medicine	ProMed Family Practice	Teresa Bailey, Pharm.D., BCPS, FCCP	27
	Ambulatory Medicine	Kalamazoo Center for Medical Studies	Kristina Rowley, Pharm.D.	14
	Ambulatory Medicine	Family Health Center Pharmacy	Mary Frances Ross, Pharm.D., BCPS	16
	Internal Medicine	Borgess Medical Center	Tracey Mersfelder, Pharm.D., BCPS	35
	Internal Medicine Academics Clinical Research	Borgess Medical Center Spindler Hall/FSU	Michael Klepser, Pharm.D., FCCP	6 16 8

	Internal Medicine Academics	Bronson Methodist Hospital	Dean Van Loo, Pharm.D., BCPS	22 1
	Geriatric Medicine	Kalamazoo Center for Medical Studies	Cynthia Feucht, Pharm.D., BCPS	17
	Drug Information Academics	Kalamazoo Center for Medical Studies	Allison Bernknopf, Pharm.D., BCPS	14
	Pediatric Medicine Academics	Bronson Methodist Hospital	Heather VandenBussche, Pharm.D.	10 1
<b>Grand Rapids</b>	Ambulatory Medicine	Spectrum Health Academic Medicine Associates	Michael Bouthillier, Pharm.D.	24
	Ambulatory Medicine	Metro Health Breton	Jodie Elder, Pharm.D., BCPS	18
	Ambulatory Medicine	Wege Health & Learning Center	John Jameson, Pharm.D., BCPS, FASHP	28
	Ambulatory Medicine	Michigan Medical PC	Sarah Raguckas, Pharm.D.	32
	Internal Medicine	Saint Mary's Health Care	Kali Schulz, Pharm.D., BCPS	36
	Internal Medicine	Spectrum Health – Butterworth	Margaret de Voest, Pharm.D.	20
	Internal Medicine	St. Mary's Health Care	H. Stephen Lee, M.S., Pharm.D.	10
	Academics	GR Medical Education Partners (MEP)	Cambria DeHoag, Pharm.D.	3

<b>Lansing</b>	Ambulatory Medicine	MSU Clinical Center	Kierstan Hanson, Pharm.D. BCPS	18
	Internal Medicine Clinical Pharmacokinetics Trauma Care	Sparrow Health System	Curtis Smith, Pharm.D., BCPS	38
	Oncology Pain Management	Sparrow Health System	Claire Saadeh, Pharm.D., BCOP	5 9
<b>Flint</b>	Internal Medicine Special Topics in Inpatient Medicine	Hurley Medical Center	Jennifer Hagerman, Pharm.D.	22 1
<b>Battle Creek</b>	Psychiatry	Battle Creek VA Medical Center	Craig Straley, Pharm.D., BCPP	27
<b>Bay City</b>	Ambulatory Medicine	Family & Child Health Clinic	Jill Covyeou, Pharm.D.	30
	Internal Medicine Pediatric Medicine	Covenant Medical Center – Harrison	Paul Thill, Pharm.D., BCPS	36 1
	Internal Medicine Infectious Disease Nutrition	Bay Medical Center	Marc Nienhuis, Pharm.D.	14 2 2
<b>Marquette</b>	Ambulatory Medicine	U.P.H.E.C.	Renee Koski, Pharm.D., FMPA, CACP	16
	Internal Medicine			16
<b>Big Rapids</b>	Academics	FSU College of Pharmacy	Jeffrey Bates, Pharm.D.	1
			Tracey Boncher, Ph.D.	2
			Adnan Dakkuri, PhD.	1
			Kim Hancock, Ph.D.	4
			Gregory Wellman, Ph.D., R.Ph.	1

**Adjunct Faculty-Supported APPE Sites**

<b>Experience</b>	<b>Practice Site</b>	<b>Location</b>	<b>Adjunct Faculty Member</b>	<b>Student-Months Precepted July 2009-June 2010</b>
Internal Medicine	Mercy Health Partners – Mercy Campus	Muskegon	Angela Green, Pharm.D., BCPS	24
	Mid Michigan Medical Center	Midland	Jim Lile, Pharm.D.	10
	– Battle Creek Health System	Battle Creek	Shaun Phillips, Pharm.D.	4
	Bronson Methodist Hospital	Kalamazoo	Christine Rosey, Pharm.D.	8
	Munson Medical Center	Traverse City	Michael Tiberg, Pharm.D., BCPS	18
Ambulatory Medicine	Grand Rapids VA Outpatient Clinic	Grand Rapids	Angela Baker, Pharm.D.	10
	Sparrow Family Health Center	Lansing	Sandra Campbell, Pharm.D.	26
	Battle Creek VA Medical Center	Battle Creek	Terrence Baugh, Pharm.D.	14
	Mercy Health Partners – Mercy Campus	Muskegon	Angela Green, Pharm.D., BCPS	18
	Aleda E. Lutz VA Medical Center	Saginaw	Jessica Lavigne, BCPS	14
	Mid Michigan Medical Center	Midland	Jim Lile, Pharm.D.	10
	Munson Medical Center	Traverse City	Michael Tiberg, Pharm.D, BCPS	10
Clinical Pharmacokinetics	St. Mary’s Health Care	Grand Rapids	Jeffrey VanHouten, Pharm.D.	2
Drug Information	Munson Medical Center	Traverse City	Michael Tiberg, Pharm.D., BCPS	1
	William Beaumont Hospital	Royal Oak	Mark Lutz, Pharm.D.	2

Pediatric Medicine	Spectrum Health – Butterworth	Grand Rapids	Karen Kovey, Pharm.D.	3
	Sparrow Health System	Lansing	Susan Vandemelio, Pharm.D.	1
Professional Organization Managements	Michigan Pharmacists Association	Lansing	Diane Miller, R.Ph.	2
Institutional Practice	Spectrum Health United Memorial	Greenville	Heather Chirstensen, Pharm.D.	2
	Bay Regional Medical Center	Bay City	Vern Botts, R.Ph.	3
	Hayes Green Beach Memorial Hospital	Charlotte	Dale Foster, Pharm.D.	4
	Aleda E. Lutz VA Medical Center	Saginaw	Marge Geiersbach, Pharm.D.	2
	Mercy Health Partners	Muskegon	Angela Green, Pharm.D.	3
	Sparrow Health System	Lansing	Margaret Malovrh, Pharm.D.	3
	Spectrum Health Reed City	Reed City	Alison Potter, R.Ph.	2
	Bronson Methodist Hospital	Kalamazoo	David Short, R.Ph.	6
	Saint Mary’s Health Care	Grand Rapids	Jeff VanHouten, Pharm.D.	2
	Bronson Methodist Hospital	Kalamazoo	Cherie Woodhams, R.Ph.	4
Advanced Community	Fulton Pharmacy	Grand Rapids	Suzanne Anthony, R.Ph.	4
	MSU Clinical Center Pharmacy	Lansing	Dana Beaman, R.Ph.	1
	Meijer Pharmacy #205	Lowell	Amber Bolen, R.Ph.	1
	Red Crown Pharmacy	Kalamazoo	Timothy Borowiak, Pharm.D.	11
	Kroger Pharmacy #893	Okemos	Catherine Carmody, R.Ph.	3
	Bronson Pharmacy – Mattawan	Mattawan	Angeli Certa, Pharm.D.	6
	Sparrow Pharmacy Plus #4	Grand Ledge	Kaci Chamberlin, R.Ph.	4
	Meijer Pharmacy #42	Saginaw	Bryan Cook, R.Ph.	6
	Kroger Pharmacy #890	East Lansing	Diana Cooper, Pharm.D.	7
	Meijer Pharmacy #221	Grandville	Mindy Edgar, Pharm.D.	1
	Meijer Pharmacy #216	Grand Rapids	April Fluit, R.Ph.	7
	Walgreens Pharmacy #10129	Byron Center	Stephen Gillich, R.Ph.	6
	WMU Sindecuse Health Center	Kalamazoo	William Green, R.Ph.	4

	Walgreens Pharmacy #12894	Traverse City	Kimberly Hines, R.Ph.	2
	K-Mart Pharmacy #3805	Big Rapids	Jennifer Horton, Pharm.D.	5
	Shopko Pharmacy	Marquette	Kenneth Hruska, R.Ph.	2
	Medicine Tree Pharmacy	Mattawan	Donald Jacks, R.Ph.	3
	Meijer Pharmacy #48	Bay City	Dianne Kaminski, R.Ph.	6
	Fred's Pharmacy	Three Rivers	Sheroyl Kirby, R.Ph.	10
	Kroger Pharmacy #893	Okemos	David Larson, R.Ph.	6
	Watkins Prescription Pharmacy	Muskegon	Steven Leafers, R.Ph.	4
	Munson Medical Center	Traverse City	Heather Litchfield, R.Ph.	4
	Meijer Pharmacy #205	Lowell	Charles Mollien, Pharm.D.	5
	Meijer Pharmacy #221	Grandville	Kimberly Oostenink, R.Ph.	3
	Wal-Mart Pharmacy #02567	Grandville	Janki Patel, Pharm.D.	1
	Portage Pharmacy	Portage	Purvi Peake, Pharm.D.	8
	Target Pharmacy #T-1052	Wyoming	Heather Pepple, Pharm.D.	3
	Diplomat Specialty Pharmacy	Grand Rapids	Jill Polidan, Pharm.D.	10
	MSU-KCMS Pharmacy	Kalamazoo	Andy Reeves, R.Ph.	4
	Diplomat Specialty Pharmacy	Flint	Jeffrey Rowe, R.Ph.	3
	Diplomat Specialty Pharmacy	Flint	Jessica Skinner, Pharm.D.	6
	East Paris Pharmacy	Grand Rapids	Pattie Smeelink, R.Ph.	8
	Meijer Pharmacy #196	Portage	Arun Tandon, R.Ph.	8
Community Pharmacy Management	Walgreens Pharmacy #5315	Muskegon	Benjamin Bringedahl, R.Ph.	1
	Amana Pharmacy	Dearborn	Abdallah Khashab, Pharm.D.	1
	The Apothecary Shoppe	Midland	Temarah Ellis, R.Ph.	3
	Walgreens Pharmacy #12894	Traverse City	Kimberly Hines, R.Ph.	4
	The Apothecary Shoppe	Midland	Carla LeMarr, CPhT	1
	Walgreens Pharmacy #05167	Bay City	Katherine Lombardo, Pharm.D.	3
	Walgreens Pharmacy #2993	Grand Rapids	Tony Michienzi, R.Ph.	6
	East Paris Pharmacy	Grand Rapids	Pattie Smeelink, R.Ph.	7
	Pharmacy Care	Middleville	Brian Swartz, R.Ph.	5



Consult/Long-Term Care	Grand Rapids Home for Veterans	Grand Rapids	George Chalmers, R.Ph.	1
	Saint Mary's Extended Care Pharmacy	Grand Rapids	Matthew Cook, R.Ph.	2
	The Apothecary Shoppe	Midland	Temarah Ellis, R.Ph.	2
	Jacobetti Home for Veterans	Marquette	Robert Flatt, R.Ph.	4
	Downtown Drugs	Mt. Pleasant	James Horton II, R.Ph.	2
	Specialized Pharmacy Services East	Livonia	Thomas Katofiasc, R.Ph.	4
	Specialized Pharmacy Services West	Grand Rapids	Bryan Korytkowski, R.Ph.	3
Hospice Care	Watkins Prescription Pharmacy	Muskegon	Steven Leafers, R.Ph.	1
Homecare	Coram Healthcare – GR	Kentwood	Tuan Do, R.Ph.	4
	Coram Healthcare – Lansing	Lansing	Brian Wortz, Pharm.D.	2
Pharmacy Administration	Spectrum Health – Butterworth	Grand Rapids	Jaculin DeYoung, Pharm.D.	2
	Zeeland Community Hospital	Zeeland	Rick Hansen, R.Ph.	3
	Bay Regional Medical Center	Bay City	Dick Boon, R.Ph.	2
	Spectrum Health – Butterworth	Grand Rapids	Natalie Paul, Pharm.D.	1
	William Beaumont Hospital	Royal Oak	Kathleen Pawlicki, R.Ph.	1
	Providence Hospital	Southfield	Carol Welch-Plaskey, Pharm.D.	1
	Spectrum Health Reed City	Reed City	N. Alison Potter, R.Ph.	1
Managed Care	Health Plus of Michigan	Flint	Mary Pat Petrillo, Pharm.D.	4
	Blue Care Network	Grand Rapids	Richard Cook, Pharm.D.	8
	Blue Cross Blue Shield of Michigan	Southfield	Jennifer Wilbanks, Pharm.D.	1
Pain Management	Munson Medical Center	Traverse City	Michael Tiberg, Pharm.D.	1
Cardiology	Spectrum Health - Butterworth	Grand Rapids	Diane VanCamp, Pharm.D.	2
HIV/AIDS	St. Mary's Health Care	Grand Rapids	Jean Lee, Pharm.D.	2
Trauma Care	Bronson Methodist Hospital	Kalamazoo	James Curtis, Pharm.D.	2
Critical Care	Spectrum Health - Butterworth	Grand Rapids	Heather Bockheim, Pharm.D.	2
	Battle Creek Health System	Battle Creek	Lori Clemmens-Funke, R.Ph., Pharm.D.	1

	Borgess Medical Center	Kalamazoo	Shanna Cole, Pharm.D.	2
	Saint Mary's Health Care	Grand Rapids	Michael Jonkman, Pharm.D.	2
	Sparrow Health System	Lansing	Denise Pratt, Pharm.D.	2
	Spectrum Health – Blodgett	Grand Rapids	Wendy Thomas, Pharm.D.	1
	Spectrum Health – Butterworth	Grand Rapids	Melissa VandenBerg, Pharm.D.	4
Specialized Areas of Community Pharmacy Practice	MSU Clinical Center Pharmacy	Lansing	Dana Beaman, R.Ph.	7
	University Compounding Center	East Lansing	Wissam Alawieh, Pharm.D.	9
	Pharmacy Advantage	Southfield	Ali Bazzi, Pharm.D.	3
	The Apothecary Shoppe @ MMMC	Midland	Courtney Biehl, Pharm.D.	4
	Keefe's Pharmacy	Muskegon	Shannon Carlson	1
	Healthway Pharmacy	Saginaw	Michael Collins, R.Ph.	7
	Genoa Healthcare	Battle Creek	Steven DeLong, R.Ph.	8
	Group Health Centre IDA	Sault Ste Marie, ON	Jordan Law, Pharm.D.	1
	Thunder Bay Community Health Services	Atlanta	Paul Droste, R.Ph.	1
	The Apothecary Shoppe	Midland	Temarah Ellis, R.Ph.	1
	Jasper Clinic	Kalamazoo	Beth Freeman, R.Ph.	5
	Diplomat Specialty Pharmacy	Grand Rapids	Paul Jensen, R.Ph.	9
	Hometown Pharmacy of Lapeer	Lapeer	David Kayfes, R.Ph.	4
	The Apothecary Shoppe	Midland	Carla LaMarr, CPhT	3
	Diplomat Specialty Pharmacy	Grand Rapids	Heidi Michels, Pharm.D.	4
	K-Mart Pharmacy #3833	Ironwood	Brenda Maloney, R. Ph., M.B.A.	1
	Keystone Pharmacy	Grand Rapids	David Miller, R.Ph., Ph.D.	4
	Health Dimensions Specialty Pharmacy	Farmington Hills	Scott Popyk, R.Ph.	4
	Physicians Compounding Pharmacy	Bloomfield Hills	Karen Raetz, R.Ph., M.S.	5
	MSU-KCMS Pharmacy	Kalamazoo	Andy Reeves, R.Ph.	5
East Paris Pharmacy	Grand Rapids	Patti Smeelink, R.Ph.	9	

Veterinary Medicine	MSU Veterinary Teaching Hospital	East Lansing	Joseph Jehl, R.Ph., M.S., D.I.C.V.P.	3
	Jensen's Animal Hospital	Petoskey	Pamela Graves, D.V.M.	4
Nuclear Pharmacy	GE Healthcare	Kentwood	Kevin Romanyk, R.Ph.	5
	Cardinal Health Nuclear Pharmacy Services	Jenison	Steven Miller, Pharm.D.	12
	Capital Pharmacy, INC.	Lansing	Richard Zellers, R.Ph.	1
Emergency Medicine	Bronson Methodist Hospital	Kalamazoo	Jesse Hogue, Pharm.D.	7
	Spectrum Health – Butterworth	Grand Rapids	Brad Miller, Pharm.D.	5
	Munson Medical Center	Traverse City	Michael Tiberg, Pharm.D.	2
Surgical Care	Spectrum Health – Butterworth	Grand Rapids	Jeffrey Barletta, Pharm.D.	5
	Spectrum Health – Butterworth	Grand Rapids	Karen McAllen, Pharm.D.	3
Nutrition	Munson Medical Center	Traverse City	Michael Tiberg, Pharm.D.	2
Addiction Medicine	VA Salt Lake City Health Care System	Salt Lake City, UT	Christopher Stock, Pharm.D.	1
Infectious Disease	West Shore Medical Center	Manistee	Michael Meagher, R.Ph., M.B.A.	1
	Spectrum Health – Blodgett	Grand Rapids	Beata Rivard, Pharm.D.	2
	Spectrum Health – Butterworth	Grand Rapids	Don Scott, Pharm.D.	4
	Munson Medical Center	Traverse City	Michael Tiberg, Pharm.D.	1
Special Topics in Inpatient Medicine	Borgess Medical Center	Kalamazoo	Ryan Bickel, Pharm.D.	1
	Spectrum Health – Butterworth	Grand Rapids	Michael Bonter, Pharm.D.	2
	Lakeland Regional Medical Center	St. Joseph	Peter Paruch, Pharm.D.	3
	St. Mary's Health Care	Grand Rapids	Sarah Paulson, Pharm.D.	2
	Spectrum Health – Blodgett	Grand Rapids	Michael Scheider, R.Ph.	5
	Spectrum Health – Butterworth	Grand Rapids	Dana Staat, Pharm.D.	2
Oncologic Disease	Saint Mary's Health Care	Grand Rapids	Lisa DeVries, Pharm.D.	2
	Sault Area Hospital	Sault Ste Marie, ON	Christy Gauthier, Pharm.D.	1
	Spectrum Health – Butterworth	Grand Rapids	Polly Kintzel, Pharm.D.	1
	Sault Area Hospital	Sault Ste Marie, ON	Clayton Maltby, Pharm.D.	1
	Munson Medical Center	Traverse City	Michael Tiberg, Pharm.D.	1

Special Topics in Ambulatory Medicine	MSU Clinical Center Pharmacy	East Lansing	Dana Beaman, R.Ph.	1
	Saint Mary's Health Care	Grand Rapids	Brian Berryhill, Pharm.D.	2
	Community Prescription Support Program (CRxSP)	Saginaw	Connie Bolander	4
	Sparrow Health System	Lansing	Matthew Bondi, Pharm.D.	4
	Bronson Methodist Hospital	Kalamazoo	Bryce Call, Pharm.D.	1
	St. Mary's Extended Care Pharmacy	Grand Rapids	Matthew Cook, R.Ph.	1
	Infusion Associates NE	Grand Rapids	Tricia McKee, R.Ph.	7
	Walgreens Option Care	Coopersville	Karen Miron, R.Ph.	1
	Critical Care Systems	Wixom	Barbara Petroff, R.Ph., M.S.	4
	MMPC	Grand Rapids	Karin Proos, Pharm.D.	3
Westside Health Center	Grand Rapids	Fred Schmidt, R.Ph.	2	
Neonatology	University of Colorado Hospital	Aurora, CO	Ashley Reilly, Pharm.D.	1
Corporate Pharmacy Practice MBA	WellStreet Care Management, LLC	Grandville	Anton Sheridan, R.Ph., M.B.A.	1
Health System Practice MBA	Priority Health	Grand Rapids	Erica Clark, Pharm.D.	1
Geriatrics Medicine	Care Resources	Grand Rapids	J. Stacey Greiner	2
International	University Angers	Angers, France	Veronique Annaix	2
	University of Bath	Bath, England	Stephen Moss	2
Clinical Research	Pfizer, Inc.	Lansing	Dominic Iacobellis, Pharm.D.	1
	Perrigo Company	Allegan	Jack Irwin, R.Ph.	1
	Abbott Laboratories	Wyoming	Kristin Smith, Pharm.D.	1

**Adjunct Faculty-Supported IPPE Sites (P-3 Community)**

<b>Location</b>	<b>Site</b>	<b>Adjunct Faculty Preceptor</b>	<b>Students Served 08-09</b>
<b>Grand Rapids Area</b>	Walgreens Pharmacy #11801	Holly Cole, R.Ph.	2
	Walgreens Pharmacy #02806	Michael Crawford, R.Ph.	4
	Walgreens Pharmacy #11415	Adriane Ebels, R.Ph.	1
	Walgreens Pharmacy #05534	Dorothy Germain, Pharm.D.	3
	Walgreens Pharmacy #07160	Troy Klairter, R.Ph.	2
	Walgreens Pharmacy #07140	Scott McDowell, R.Ph.	4
	Walgreens Pharmacy #03012	Angela Michienzi, R.Ph.	2
	Walgreens Pharmacy #04413	Robert Rogalke, R.Ph.	8
	Walgreens Pharmacy #02583	Nikkia Parks, Pharm.D.	1
	Walgreens Pharmacy #02898	Sally Ngo, R.Ph.	2
	Walgreens Pharmacy #09132	Robert Swider, R.Ph.	1
	CVS Pharmacy #8306	Aaron Gragevi, Pharm.D.	2
	CVS Pharmacy #7549	Kiet Lam, R.Ph.	3
	CVS Pharmacy #8297	Asieh Moghaddam, R.Ph.	2
	Spartan #0254-Family Fare	Ewa Corbett, R.Ph.	3
	Spartan #0335-Family Fare	Jennifer Deewaard, Pharm.D.	2
	Spartan #0137-Family Fare	Jeffrey Marentette, R.Ph.	2
	Target Pharmacy #T-1052	Melisa McKendry, R.Ph.	1
	Target Pharmacy #T-2015	Oday Kasim, Pharm.D.	3
	Target Pharmacy #T-0399	Kathy McMillan, Pharm.D.	2
	Meijer Pharmacy #050	Moody Nicholas, R.Ph.	3
	Meijer Pharmacy #312	Bradley Tetlow, R.Ph.	4
	Meijer Pharmacy #226	Holly Vanlente, R.Ph.	2
	St. Mary's Family Pharmacy	David Terkeurst, R.Ph.	7
	St. Mary's Extended Care Pharmacy	Matthew Cook, R.Ph.	1
	St. Mary's Southwest	Amanda Eardley, R.Ph.	5
	Costco Pharmacy	Julie Morales, R.Ph.	1
	Kay Pharmacy	Ted Myers, R.Ph.	4
	K-Mart Pharmacy #4796	Jenny Moulds, R.Ph.	2
	Parkwood Pharmacy	Stephen Felkey, R.Ph.	4
	Professional Pharmacy, Inc.	David Hopkins, R.Ph.	2
	Walgreens Pharmacy #07952	Andrea Cusack, Pharm.D.	1
	Pennock Hospital	Thomas Magnifico, R.Ph.	2
Weick's Pharmacy	Richard Campbell, R.Ph.	2	

<b>Kalamazoo Area</b>	Walgreens Pharmacy # 07894	Alan Casper, R.Ph.	4
	Walgreens Pharmacy#02916	Patricia Chrusciel, R.Ph.	1
	Walgreens Pharmacy #03147	Richard Corstange, R.Ph.	2
	Walgreens Pharmacy #04991	Piyush Patel, R.Ph.	2
	Walgreens Pharmacy #07430	Ujval Patel, R.Ph.	2
	Walgreens Pharmacy #03053	William Plemmons, R.Ph.	2
	Walgreens Pharmacy #07934	Jolene Stiver, R.Ph.	1
	Walgreens Pharmacy #10081	James Posthumus, R.Ph.	5
	Spartan #1575 – D& W Pharmacy	Lawrence Frigo, Pharm.D.	2
	WMU Sindecuse Health Center	William Green, R.Ph.	2
	Meijer Pharmacy #119	Martin Steinke, R.Ph.	4
	Family Health Center Pharmacy	Elizabeth Prins, Pharm.D.	3
	Westlake Drug	Derek Quinn, Pharm.D.	4
	MSU-KCMS Pharmacy	Andy Reeves, R.Ph.	8
	Borgess Medical Center	Irene Skyllis, R.Ph.	4
	Target Pharmacy #T-0604	Michelle Norman, R.Ph.	2
	Value Drugs – Community Pharmacy	Kerri Moore, R.Ph.	2
	Spartan #1980-Family Fare	Debra Ferguson, R.Ph.	2
	Hill’s Pharmacy	Kelly Soekarmoen, R.Ph.	1
	Fred’s Vicksburg Community Pharmacy	Frederick Nelson, R.Ph.	2
Value Drugs – Allegan	Ryan Moore, R.Ph.	2	
<b>Big Rapids</b>	K-Mart Pharmacy #3805	Jennifer Horton, Pharm.D.	3
	Rite Aid Pharmacy #7810	Justin Hampel, Pharm.D.	1
	Walgreens Pharmacy #07416	Greg Videtich, R.Ph.	4
	Meijer Pharmacy #203	Kirstin Sims, R.Ph.	1
<b>Battle Creek</b>	Walgreens Pharmacy #09130	Danyel Bruski, R.Ph.	1
	Larmour’s Drug East	John Drew, R.Ph.	2
	Walgreens Pharmacy #02856	Frank Souza, R.Ph.	2
<b>Saginaw/Bay City</b>	Meijer Pharmacy #42	Bryan Cook, R.Ph.	2
	Meijer Pharmacy #48	Dianne Kaminski, R.Ph.	1
	Princing’s Pharmacy	Dennis Princing, R.Ph.	2
<b>Holland</b>	Walgreens Pharmacy #02825	Gregory Rinckey, R.Ph.	5
	Spartan #0123 - Family Fare	Joseph Borgman, R.Ph.	1
	Spartan #1574 – D&W Pharmacy	Tate Eggers, R.Ph.	1
<b>Detroit Area</b>	Prescription Corner Pharmacy	Ramzi Jaward, R.Ph.	1
	Food Town Pharmacy	Abdallah Khashab, Pharm.D.	2
	Walgreens Pharmacy #05596	Abdul Charara, R.Ph.	2
	Highland Pharmacy	Neil Mehta, Pharm.D.	1

<b>Alpena</b>	Walgreens Pharmacy #09148	Jeffrey Burg, R.Ph.	1
<b>Charlevoix</b>	Central Drug Store	John Ochs, R.Ph.	1
<b>Decatur</b>	Decatur Pharmacy	Nancy Krueger, R.Ph.	3
<b>Delton</b>	Delton Family Pharmacy	Michael Holtz, R.Ph.	1
<b>DeWitt</b>	DeWitt Pharmacy	Patrick Bridson, R.Ph.	1
<b>Iron Mountain</b>	The Drug Store	Dennis Vicenzi, R.Ph.	2
<b>Kent City</b>	Grice's Pharmacy	Melissa Hills, R.Ph.	2
<b>Muskegon</b>	Walgreens Pharmacy #05315	Benjamin Bringedahl, R.Ph.	1
<b>Niles</b>	Martin's Pharmacy	Amie Boulanger, R.Ph.	1
<b>Sault Ste. Marie</b>	Arfstrom Pharmacies, Inc.	Donald Corbiere, R.Ph.	1
<b>South Haven</b>	Value Drugs – South Haven	Daniel Simon, R.Ph.	1

**Adjunct Faculty-Supported IPPE Sites (P-3 Institutional)**

<b>Location</b>	<b>Site</b>	<b>Adjunct Faculty Preceptor</b>	<b>Students Served 08-09</b>
<b>Grand Rapids Area</b>	Spectrum Health – Butterworth	Ellen VanStee, R.Ph., M.B.A.	8
	Spectrum Health – Butterworth	Natalie Paul, Pharm.D., B.C.P.S.	6
	Spectrum Health – Blodgett	Jeffrey Conzelmann, Pharm.D.	1
	Saint Mary’s Health Care	Jeffrey VanHouten, Pharm.D.	3
	Metro Health Hospital	Ross Eardley, R.Ph., B.C.P.S.	2
<b>Kalamazoo Area</b>	Borgess Medical Center	Stacy Vaeth, M.S., Pharm.D.	6
	Borgess Medical Center	Kimberly Melgarejo, Pharm.D.	3
	Bronson Methodist Hospital	Fred Schmidt, R.Ph.	10
<b>Big Rapids</b>	Spectrum Health – Reed City	Alison Potter, R.Ph.	1
	Mecosta County Medical Center	Lora Schrader	1
<b>Battle Creek</b>	Battle Creek Health System	Sean Patterson, Pharm.D.	3
	Battle Creek VA Medical Center	Jack Robbins, R.Ph.	1
<b>Saginaw/Bay City</b>	Aleda E. Lutz VA Medical Center	Jessica Levigne, Pharm.D.	4
	Bay Regional Medical Center	Vern Botts, R.Ph.	3
	St. Mary’s of Michigan	Stephen Beyer, Pharm.D., B.C.P.S.	4
	Sheridan Community Hospital	Mary Thomas, R.Ph.	3
	Covenant Medical Center Cooper	Kenneth Hauger, R.Ph.	4
	Covenant Medical Center Harrison	Kenneth Arnold, R.Ph.	2
<b>Holland</b>	Holland Community Hospital	Agatha Dang, Pharm.D.	1
	Zeeland Community Hospital	Rick Hansen, R.Ph.	4
<b>Detroit Area</b>	Oakwood Hospital & Medical Center	Eric Munson	4
	John D. Dingell VA Medical Center	Michael Maher, R.Ph.	4
	Havenwyck Hospital	Sharon Jett, R.Ph., Pharm.D.	1
	Henry Ford Macomb Hospital – Clinton Township	Norman Buss, R.Ph., Pharm.D.	1
<b>Alpena</b>	Alpena General Hospital	Julie Grabiell, R.Ph.	3
<b>Allegan</b>	Allegan General Hospital	Andy Brockway, R.Ph.	1
<b>Jackson</b>	Allegiance Health	Gay Alcenius, Pharm.D.	9
<b>Laurium</b>	Aspirus Keweenaw Hospital	Jessica Bessner, Pharm.D.	1
<b>Danville, PA</b>	Geisinger Medical Center	Dean Parry, R.Ph.	1
<b>Muskegon</b>	Gerber Memorial Health Services	Carrie Morrison, R.Ph.	2
	Mercy Health Partners – Mercy Campus	Angela Green, Pharm.D.	4
	Mercy Health Partners – Hackley Campus	George Kuhnert, R.Ph.	4



<b>Sault Ste. Marie</b>	Chippewa War Memorial Hospital	Michelle Nogalo, R.Ph., M.B.A.	3
<b>South Haven</b>	South Haven Community Hospital	Sandeep Mehta, R.Ph.	1
<b>Lansing Area</b>	Ingham Regional Medical Center	Ronald Cosson, R.Ph.	10
	Sparrow Health System	Todd Belding, R.Ph.	4
	Sparrow Health System	Margaret Malovrh, Pharm.D.	1
<b>Niles</b>	Lakeland Community Hospital – Niles	Neil Johnson, R.Ph.	1
<b>Traverse City</b>	Munson Medical Center	Michael Tiberg, Pharm.D.	2
<b>Marquette</b>	Marquette General Hospital	Carol Farmer, Pharm.D.	2
<b>Mt. Pleasant</b>	Central Michigan Community Hospital	Amy Ziegler, Pharm.D., B.C.P.S.	1
	Central Michigan Community Hospital	Janet Ross, R.Ph.	1
<b>St. Johns</b>	Clinton Memorial Hospital	Julie Schrantz	5
<b>Manistee</b>	West Shore Medical Center	Michael Meagher, R.Ph., M.B.A.	2
<b>Ann Arbor</b>	Select Specialty Hospital – Ann Arbor	Patricia Cole	3
<b>Hastings</b>	Pennock Hospital	Thomas Magnifico, R.Ph.	3
<b>Escanaba</b>	OSF St. Francis Hospital	Patricia Kohli, R.Ph.	1
<b>Marshall</b>	Oaklawn Hospital	David Goedde, R.Ph.	4
<b>Petoskey</b>	Northern Michigan Hospital	Susanne Larrabee, R.Ph.	3
<b>Grand Haven</b>	North Ottawa Community Hospital	Darcy Tussing,	1
<b>Ludington</b>	Memorial Medical Center of West Michigan	Michael Gunberg, R.Ph.	3
<b>Flint Area</b>	Memorial Healthcare	Evan Cicinelli, R.Ph.	1
<b>Charlotte</b>	Hayes Green Beach Memorial Hospital	Allen Doan, Pharm.D.	1
<b>Hillsdale</b>	Hillsdale Community Health Center	Gregg Russell, R.Ph.	1

## Appendix 24.3

### FTE Resources & Student Totals

<b>Section A – FTE Totals</b>						
<i>NOTE: Information in this section is the Total FTE, not simply those FTE added or having activity during the academic year.</i>						
	<b>Academic Year</b>					
<b><u>Pharmacy Faculty</u></b>	<b><u>07-08</u></b>		<b><u>08-09</u></b>		<b><u>09-10<sup>1</sup></u></b>	
<b>FTE (total # paid FTE)</b>	<b>Total # FTE Filled</b>	<b>Total # FTE Vacant</b>	<b>Total # FTE Filled</b>	<b>Total # FTE Vacant</b>	<b>Total # FTE Filled</b>	<b>Total # FTE Vacant</b>
Pharm Science	12.0	1.0	11.0	2.0	12.0	1.0
Pharm Practice	27.45	6.3	24.45	9.3	27.2	6.3
Other department (specify)						
Dir. Of Office Campus Student Services	1.0	0.0	1.0	0.0	1.0	0.0
Dir. Of External Clin. Operations	1.0	0.0	1.0	0.0	1.0	0.0
Practicum Director	1.0	0.0	1.0	0.0	1.0	0.0
Administration	3.0	1.0	2.0	2.0	3.0	1.0
<b>Total # FTE (filled/vacant)</b>	<b>45.45</b>	<b>8.3</b>	<b>40.45</b>	<b>13.3</b>	<b>45.2</b>	<b>8.3</b>

<sup>1</sup>Reflecting appointments and resignations to date.

	Academic Year					
<u>Pharmacy Faculty</u>	<u>10-11<sup>1</sup></u>					
<b>FTE (total # paid FTE)</b>	<b>Total # FTE Filled</b>	<b>Total # FTE Vacant</b>	<b>Total # FTE Filled</b>	<b>Total # FTE Vacant</b>	<b>Total # FTE Filled</b>	<b>Total # FTE Vacant</b>
Pharm Science	12.0	1.0				
Pharm Practice	26.6*	5				
Other department (specify)						
Dir. Of Office Campus Student Services	1	0				
Dir. of External Clinical Operations	1	0				
Practicum Director*	1	0				
Administration	3	0				
<b>Total # FTE (filled/vacant)</b>	<b>44.6</b>	<b>6</b>				

<sup>1</sup>Reflecting appointments and resignations to date.

<b>Section B – FTE Changes</b>				
<b><u>Pharmacy Faculty</u></b>	<b><u>07-08</u></b>	<b><u>08-09</u></b>	<b><u>09-10</u></b>	<b><u>10-11</u></b>
<b>Total Resignations during year</b>	7.0	4.0	2.25	0
<b>Total Retirements during year</b>	0	0	0	1
<b>Total New Hires during year</b>	1.75	2.0	8.0	In process
<b>Total Newly Approved Positions during year</b>	3.25	0	0	0
<b>Total Positions lost during year</b>	0	0	0.25	12

<sup>1</sup>Reflecting appointments and resignations to date. <sup>2</sup> One position moved to supplemental faculty FTE

<b>Section C – Students Enrolled</b>				
	<b><u>07-08</u></b>	<b><u>08-09</u></b>	<b><u>09-10</u></b>	<b><u>10-11</u></b>
<b>Total Student FTE (professional years only)</b>	P1 = 154 <sup>1</sup>	P1 = 153 <sup>2</sup>	P1 = 153 <sup>3</sup>	
	P2 = 148	P2 = 152	P2 = 155	
	P3 = 146	P3 = 145	P3 = 149	
	P4 = 129	P4 = 139	P4 = 145	
	NonTrad = 1	NonTrad = 2	NonTrad = 2	
	Total = 578	Total = 591	Total = 604	

<sup>1</sup> Includes 4 students remediated from 04-05 entering class

<sup>2</sup> Includes 3 students remediated from 07-08 entering class

<sup>3</sup> Includes 2 students remediated from 08-09 and 1 student from 06-07 entering classes

<b>Section D – Experiential Program</b>				
<b><u>Practice Experience Instructors</u></b>	<b><u>07-08</u></b>	<b><u>08-09</u></b>	<b><u>09-10<sup>1</sup></u></b>	<b><u>10-11</u></b>
% of advanced pharmacy practice experiences precepted by full-time faculty	75%	51%	49%	
% of advanced pharmacy practice experiences precepted by contract/volunteer instructors	25%	49%	51%	

<sup>1</sup>Based on 09-10 registration data to date

## Appendix 24.4

### Summary Tables of Position Activity

**Table 1**  
**Positions Filled/Added – 2007/2008 through 2009/2010**

<b>Position</b>	<b>Practice /Location</b>	<b>Comments</b>
<b>Academic Year 2007-08</b>		
Pharmacy Practice – Ambulatory Medicine 0.25 FTE (J10001)	MSU Clinical Center East Lansing	Part-time appointment following resignation from permanent position
Pharmacy Practice – Community Practice 0.5 FTE (#F21562)	Meijer Pharmacy Grand Rapids	Filled 9/16/07
Pharmacy Practice – Ambulatory Medicine 1.0 FTE (#F21564)	Spectrum Health Grand Rapids	Filled 10/15/07
<b>Academic Year 2008-09</b>		
Pharmacy Practice – Internal Medicine 1.0 FTE (#F21508)	St. Mary’s Mercy Med. Ctr. Grand Rapids	Filled 07/21/08
Pharmacy Practice – Internal Medicine 1.0 FTE (#F21507)	Bronson Methodist Hospital Kalamazoo	Filled 08/01/09 (Resigned 05/19/09 see Table 2)
<b>Academic Year 2009-10</b>		
Pharmacy Practice – Ambulatory Medicine 1.0 FTE (#F21512)	Sparrow Family Practice Clinic Lansing	Filled 07/01/09 thru contract with MSU Clinical Center
Pharmacy Practice – Ambulatory Medicine 1.0 FTE (#F21502)	MetroHealth Breton Clinic Grand Rapids	Filled 08/03/09
Pharmacy Practice – Ambulatory Medicine 1.0 FTE (#F21522)	MSU Clinical Center East Lansing	Filled 08/17/09
Pharmacy Practice – Ambulatory Medicine 1.0 FTE (#F21509)	Kalamazoo Ctr. Med. Studies Kalamazoo	Filled 09/08/09
Pharmaceutical Sciences – Social/Admin. Science 1.0 FTE (#F21529)	College of Pharmacy/MERC Big Rapids/Grand Rapids	Filled 10/01/09
Pharmacy Practice – Community Practice 1.0 FTE (#F21565)	MERC Grand Rapids	Filled 10/05/09
Pharmaceutical Sciences – Medicinal Chemistry 1.0 FTE (#F21539)	College of Pharmacy Big Rapids	Filled 01/04/10

Assistant Dean, Student Affairs and Assessment 1.0 FTE (#A10066)	College of Pharmacy Big Rapids	Filled 08/01/09
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**Table 2  
Resignations, Reductions and Reassignments – 2008/2009 through 2010/2011**

<b>Position</b>	<b>Location</b>	<b>Date/(Reason for Departure)</b>	<b>Status</b>
<b>Academic Year 2007-08</b>			
Administration – Asst. Dean Student Affairs 1.0 FTE (A10066)	Big Rapids	Resignation 08/07 (accepted Dean position – Husson University)	Position filled 08/09
Pharmacy Practice – Ambulatory Medicine 1.0 FTE (F21509)	Grand Rapids	Resignation 11/07 (accepted Dept. Head position – Sullivan University)	Position filled 09/09
Pharmacy Practice – Electives 1.0 FTE (F21540)	Grand Rapids	Resignation 03/08 (personal reasons)	Recruitment ongoing
Administration – Asst. Dean Pharmaceutical Sci. 1.0 FTE (A10069)	Big Rapids	Resignation 05/08 (accepted Assoc. Dean position – Husson University)	Recruitment suspended
Pharmacy Practice – Internal Medicine 1.0 FTE (F21516)	Kalamazoo	Resignation 05/08 (accepted Assoc. Dean Position – Union University)	Recruitment ongoing
Pharmaceutical Sciences – Med. Chem. 1.0 FTE (F21539)	Big Rapids	Resignation 06/08 (accepted faculty position)	To be filled 01/04/10
Pharmacy Practice – Internal Medicine 1.0 FTE (F21504)	Grand Rapids	Resignation 06/08 (accepted Residency Director position)	Recruitment ongoing
<b>Academic Year 2008-09</b>			
Pharmacy Practice – Internal Medicine 1.0 FTE (F21522)	Grand Rapids	Resignation 07/08 (accepted clinical practice position)	Position filled
Pharmacy Practice – Ambulatory Medicine 1.0 FTE (F21508)	East Lansing	Resignation 08/07 (personal reasons)	Position filled
Pharmacy Practice – Ambulatory Medicine 1.0 FTE (F21512)	Lansing	Resignation 04/09 (accepted clinical practice position)	Filled 07/01/09 thru contract with MSU Clinical Center

Pharmacy Practice – Internal Medicine 1.0 FTE (F21507)	Kalamazoo	Resignation 05/09 (accepted clinical practice position)	Position posting pending review of assignment options
<b>Academic Year 2009-10</b>			
Pharmaceutical Sciences – Social and Administrative Sciences 1.0 FTE (F21529)	Big Rapids	Resignation 08/09 (accepted Asst. Dean Position – Ferris State University)	Recruitment and appointment completed 10/01/09
Pharmacy Practice – 0.25 FTE (J10001)	East Lansing	Position eliminated with appointment of permanent faculty member	
Pharmacy Practice – 1.0 FTE (F21560)	Kalamazoo	Resignation 5/10 (personal reasons)	Position open / to be posted
<b>Academic Year 2010-2011</b>			
Practicum Director 1.0 FTE (F21507)	Grand Rapids	Position eliminated with appointment of permanent faculty member	Move to faculty position F21507
Dean 1.0 FTE (A10170)	Big Rapids	Resignation 10/10 (retirement)	
Pharmacy Practice Position F21513		Moved to supplemental faculty FTE	



**Table 3**  
**Summary of Open Positions – May 2010**

<b>Date Open/(Position)</b>	<b>Position Description</b>	<b>Status</b>	<b>Comments</b>
09/05 (F21537)	Pharmaceutical Sciences – Social/Administrative Sciences (1.0 FTE)	Recruitment ongoing	Position restructured; responsible for P2 Practice Skills Laboratory
09/09 (F21540)	Pharmacy Practice – General Adult Medicine (1.0 FTE)	To be posted	Position reassigned – to be posted Internal Medicine
07/07 (F21513)	Pharmacy Practice – Specialty TBA (1.0 FTE)	Position posting pending review of assignment options	Reassigned to supplemental faculty FTE
08/08 (F21516)	Pharmacy Practice – General Adult Medicine (1.0 FTE)	Recruitment ongoing	
08/08 (F21504)	Pharmacy Practice – General Adult Medicine(1.0 FTE)	Recruitment ongoing	
05/09 (F21507)	Pharmacy Practice – Practicum Director (1.0 FTE)	Practicum Director to be reassigned to permanent faculty position	
5/10 (F21560)	Pharmacy Practice – Ambulatory Medicine (1.0 FTE)	To be posted	
3/09 (F21512)	Pharmacy Practice – Ambulatory Medicine (1.0 FTE)	Position filled with contractual services with MSU Clinical Center	

## Appendix 25.1

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### FERRIS STATE UNIVERSITY COLLEGE OF PHARMACY DEPARTMENT OF PHARMACEUTICAL SCIENCES

#### TENURE POLICY: PROCEDURES AND CRITERIA

##### Section I. Introduction

The 2002-2006 Agreement between the Board of Control of Ferris State University and the Ferris Faculty Association, MEA-NEA requires the tenured members of each department to be responsible for:

- A. Devising policy and procedures for attainment of tenure.
- B. Determining the criteria for attainment of tenure.
- C. Reviewing performance of non-tenured bargaining unit members.
- D. Submitting recommendation to the department head regarding granting or denying tenure to the applicant.
- E. Amending tenure review policy and procedures.

##### Section II. Purpose

The tenured faculty members of the Department of Pharmaceutical Sciences, to assure the quality of instruction, scholarly activities, and service, have established criteria for the attainment of tenure. The policy and procedures are structured to assist the non-tenured faculty in improving their performance to qualify for tenure. They are also intended to ensure that the tenured faculty themselves have sufficient information to make a fair judgment of the candidate's performance, while simultaneously affording assistance and due process to the non-tenured faculty.

##### Section III. Criteria For Attainment of Tenure

- A. The primary responsibility of a tenure-track faculty member is to attain and continue to maintain excellence in the following areas:
  1. Teaching/Advising
  2. Research/Scholarly Activities/Professional Development
  3. Service/Professionalism

Because FSU is primarily a teaching university, instruction and advising shall be considered of paramount significance in tenure evaluation and, as such, shall be weighted more heavily.

- B. The Appendix enumerates the areas in which the candidate's performance will be evaluated for a reappointment/tenure decision. The checklist is intended to serve as a guideline to assist the candidate in the portfolio preparation.

## Section IV. Committees Structure

- A. Tenure Review Committee (TRC)
  - 1. The tenure review committee will be comprised of the tenured bargaining unit members of the Department.
  - 2. A chair shall be elected by members of the TRC each year.
  - 3. In the first month of classes of the fall semester, a meeting of the tenured faculty will be convened by the past chair.
- B. Candidate's Tenure Committee (CTC)
  - 1. A three-member candidate's tenure committee will be elected by the TRC within the first month of employment to coordinate the evaluation of each candidate.
  - 2. The committee shall include at least one member from the candidate's seniority group.
  - 3. The TRC chair will appoint a CTC member to chair the committee and another member, in consultation with the candidate, to serve as the candidate's mentor.
  - 4. A vacancy on the committee will be filled by a tenured faculty member selected by the TRC chair. This selection is subject to the approval of the TRC at its next meeting.

## Section V. Procedures For Evaluation

- A. The chair of the TRC will provide all new tenure-track faculty members with the tenure policy of the Department within the first month of appointment, and will keep them informed of any changes to the policy that might be adopted during their tenure-track period immediately following adoption. Also, their attention should be directed to Section 3 (tenure) of the FSU-FFA Agreement.
- B. The CTC members are required to independently observe, at separate events, the tenure-track candidate for the purpose of evaluation. This should be done twice annually in different semesters with the exception of the year tenure is requested. The CTC will report its findings to the TRC no later than July 1. This report shall include:
  - 1. Written assessment by each member based on a classroom (or other instructional settings) visit. The time of the visit, contingent upon the ability of evaluator to attend, shall be the candidate's choice. However, such a visit shall preferably occur in the second half of the semester.
  - 2. Student evaluation, using FSU Student Assessment of Instruction form, administered by The chair or a designated member of CTC.

- C. The candidate shall prepare a portfolio in accordance with the criteria listed in Appendix A and shall submit it to the CTC by September 15 in his/her second and each subsequent year of employment. An updated curriculum vita shall be included in the portfolio.
- D. The CTC shall evaluate the candidate based on the data collected and portfolio submitted in the previous year. In a written report, the CTC will advise the TRC of its evaluation of the candidate along with its recommendation. All the documentation collected during the evaluative process must be appended to the report.
- E. The chair of the TRC shall advise the candidate of the TRC preliminary evaluation and recommendation for reappointment or non-reappointment by November 1. If the evaluation refers to any deficiencies noted in the candidate's performance, suggestions shall be made to help the individual correct them.
- F. In the event the candidate does not agree with the preliminary recommendation, he/she shall be afforded an opportunity to meet with the TRC by November 15.
- G. The TRC will forward, in writing, its final evaluation and recommendation to the department head and to the candidate by November 20. Any written rebuttal presented by the candidate to the TRC shall be appended to the evaluation.
- H. The department head shall also evaluate the candidate annually and will provide a written copy of the evaluation and recommendation to the candidate and the dean by December 10.
- I. The decision to grant or deny the first non-tenure reappointment rests solely with the Vice President for Academic affairs (VPAA). The non-tenured member shall be notified of such a decision no later than March 15 of the first year of employment.
- J. All subsequent decisions with regard to reappointment or non-reappointment require affirmative recommendations by both TRC and VPAA. The non-tenured member shall be notified of the decision no later than January 30 of the second year of employment and each subsequent year except for the year tenure is requested.

### ***Section VI. Procedure for Consideration for Tenure***

All new members of the faculty must serve a non-tenured period prior to applying for tenure. The non-tenured period shall commence with the first fall semester of appointment. A non-tenured faculty member must apply for tenure no later than the fifth academic year. Failure to apply for tenure consideration shall result in denial of tenure.

A non-tenure member with an initial rank of instructor or assistant professor may not apply for tenure prior to the fifth year. A non-tenured member with an initial academic rank of associate professor may not apply for tenure prior to the fourth year. A non-tenured member with an initial rank of professor may not apply for tenure prior to the third year.

- A. The chair of the TRC shall notify the faculty eligible for tenure no later than September 1.
- B. The candidate shall submit his/her application for tenure and supporting documentation to the TRC no later than October 1.
- C. By November 1, the TRC will advise the applicant of its evaluation and intended recommendation.
- D. By November 15, the applicant may request in writing a meeting with TRC, which shall be scheduled in a timely fashion.
- E. The TRC shall prepare its final written report and recommendation, with all supporting documents, which shall be presented concurrently to the department head and to the applicant by December 15.
- F. The recommendation of the TRC shall be based on a simple majority vote of all its members and shall be one of the following:
  - 1. Grant tenure, beginning with the start of the next academic year.
  - 2. Grant one additional non-tenured year during which the applicant must fulfill specific conditions in order to be eligible for tenure. Upon completion of that conditional year, the tenure application process will again be followed. In the event of denial of tenure, employment will be terminated at the end of the academic year in which the tenure is denied.
  - 3. Deny tenure and terminate employment at the end of the next academic year.
- G. The department head shall attach his/her evaluation and recommendation and shall forward all supporting documentation to the dean. The dean shall forward the recommendations and supporting documentation to the VPAA and shall append his/her recommendation and evaluation. Neither the department head nor the dean may change the TRC's recommendation.

### *Section VII. Data Security*

A. The data generated during the non-tenured period shall be stored in a locked file in the department head's office. Also, the records shall be kept for a period of three years beyond the date of tenure decision.

### *Section VIII. Review and Amendment*

- A. Tenure evaluation procedures and criteria shall be reviewed annually by the TRC.
- B. This policy may be amended, for consistency with the current FSU-FFA Agreement, by a majority vote of the members of the TRC. Written copies of the proposed amendment must be distributed at least one week prior to voting.
- C. Any proposed amendment(s) must be submitted to the dean by February 15. The dean shall forward the proposal and his/her recommendation to the VPAA who shall either accept or reject the amendment(s) by April 15.

Approved by the tenured faculty on November 14, 2003.

## APPENDIX

Quality is the key to reappointment/tenure at the FSU College of Pharmacy. Quality is assessed by the performance of the faculty in three general areas of academic endeavor: teaching and advising, scholarly activities, and service. A candidate for reappointment/tenure should demonstrate notable potential/performance in at least one of the areas of endeavor while demonstrating satisfactory performance in the others. It should be noted that reappointment or tenure is based on the recognition of past performance and the level of current performance, along with a reasonable assurance that the non-tenured faculty member is capable of even greater accomplishments.

The activities associated with teaching, scholarship, and service stated below are not all inclusive. Recognizing the diversity of the faculty, the candidate is free to provide the CTC and TRC with any additional material, including letters from different sources, in support of reappointment/tenure.

- A. Teaching refers to classroom instructional activities as well as to individual or small group activities related to classroom or laboratory instruction.

The applicant shall provide the CTC/TRC with a teaching portfolio that may include:

1. A self-evaluation statement reflecting the candidate's philosophy regarding teaching, and the impact of such philosophy on student learning, and future plans for improvement.
2. Samples of instruction material that could include items such as course syllabi and objectives, handouts, and other documentation deemed appropriate.
3. Student evaluations of teaching.
4. Development of new courses or revision of existing ones.
5. Experiences with instructional technology and pedagogy.
6. Student counseling and advising in academic performance and career options.
7. Advising of student organizations.
8. Advising individual students in the academic and professional domains.
9. Any other relevant material such as honors and awards for teaching excellence, professional development, and authorship of teaching material.

10. Letters from the candidate's tenure review committee.

- B. Scholarly activities refer to activities such as the scholarship of teaching, basic and applied research, and professional development.**

The candidate shall provide the Committee with a scholarly activities portfolio that may include:

1. A statement that presents an overview of the candidate's scholarly activities.
2. Reprints of publications.
3. Research projects, both completed and in progress.
4. Submission of research grants.
5. Funding for research from all sources.
6. Presentation of research.
7. Serving as a journal referee or in any other capacity that impacts dissemination of knowledge to the academic community at large.
8. Attendance at professional meetings at the state, national, and international level.
9. Involvement in University seminars, workshops, and meetings on scholarship of teaching.
10. Any other activity that reflects the candidate's involvement in any type of scholarship.

- C. Service refers to any activity, not related to teaching and advising or scholarly activities, that is deemed beneficial to University, College, Department, profession, higher education, and community.**

The candidate shall provide the TRC/CTC with a portfolio that includes a self-evaluation statement describing his/ her accomplishments and level of involvement in service activities and is encouraged to include any supporting documentation such as letters. Examples of service activities are:

1. College and University committees.
2. Local, state, and national professional and higher education organizations.
3. Local, state, and federal agencies.
4. Consultancy to private and public organizations.
5. Civic service and cultural organizations.



## Appendix 25.2

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### **Tenure Policy: Department of Pharmacy Practice Ferris State University College of Pharmacy Approved 10/15/08**

#### **Philosophy**

The tenure policy is designed to foster an excellent tenured faculty capable of meeting the needs of students, the department, the College, and the profession. The tenure process is intended to be a collegial mechanism for development of faculty members in the areas of Teaching, Scholarly Activities, and Service.

#### **Definitions**

**The Tenure Review Committee (TRC):** The TRC will be comprised of the tenured faculty and administrators within the Pharmacy Practice department. The committee shall elect a chair annually. It is the TRC chair's responsibility that each new candidate receives a copy of the tenure policy.

**Candidate:** Each non-tenured faculty member or administrator shall be referred to throughout this policy as a candidate. Upon granting of tenure, the candidate will become a member of the TRC.

**Peer Review Team:** Each candidate will be assigned a team of 2 tenured faculty by the TRC chair, ideally one from tenured faculty employed with Ferris 10 years or more and 1 tenured faculty employed with Ferris for less than 10 years. Other considerations will include similar practice settings (e.g. IM or Am Care) and location. It is encouraged to work as a team and allow the candidate to also view and evaluate the tenured faculty lectures informally.

**Tenure Portfolio:** Each candidate is responsible for compiling a portfolio documenting their progress as a faculty member according to the guidelines in Appendix A. This portfolio will also include faculty and student teaching evaluations as described below. The candidate's peer review team must review this portfolio annually.

#### **Evaluation Process**

All peer review team members will evaluate each candidate during every academic year. Didactic and experiential settings must be evaluated each academic year by at least one peer review team member. No visits are required in the year of application for tenure. Peer review teams will meet regularly throughout the academic year to plan and schedule evaluation dates, discuss recommendations or suggestions for improvements, discuss issues that arise regarding teaching experiences, and to share ideas and experiences among group members. The peer review team's tenured faculty members will send a written report to the candidate annually that outlines their progress in achieving tenure. Items to consider are listed in Appendix B. An outline of what should be included in the report is listed in Appendix C.

Standardized student evaluations will be conducted as per department policy for each candidate. The results of the student evaluations will be compiled by the Department Head and forwarded to the candidate for inclusion in their tenure portfolio.

## Annual Review

Each candidate must submit a tenure portfolio to the peer review team by September 15<sup>th</sup> of each year. The TRC chair will notify each candidate by September 1<sup>st</sup> of each year to submit a tenure portfolio to the peer review team. The portfolio must include all available teaching evaluations from the previous year(s). The peer review team must submit a report to the TRC chair by October 1<sup>st</sup> summarizing the candidate's tenure portfolio, including a copy of all evaluations and recommendations made by the peer review team. A recommended outline for this report is included in Appendix C. The report must contain the peer review team's recommendation regarding continuation of the candidate in the tenure process or tenure attainment.

Each candidate's report will be reviewed by the TRC before November 1<sup>st</sup> of each year. A vote will be held by the TRC to recommend either 1) reappointment or non-reappointment, for those candidates not eligible for tenure application that year; or 2) tenure, one additional non-tenured year, or denial of tenure for those candidates in their year of tenure application.

The TRC chair will forward the TRC recommendation report (as required by the FFA/FSU agreement contract) to the candidate by November 1<sup>st</sup>. The report must include a recommendation regarding reappointment or tenure, whichever is applicable for the candidate. The final report will be forwarded to the Pharmacy Practice department head by November 20<sup>th</sup>. The candidate may request a meeting with the TRC, if desired, prior to submission of the report to the Department Head. The TRC chair will be responsible for arranging such a meeting by November 10<sup>th</sup> and ensuring that the timeline is maintained.

The Department Head will review the candidate's TRC report and tenure portfolio annually and provide a written evaluation and recommendation to the candidate and the Dean by December 10<sup>th</sup>. The Department Head may also meet with each candidate to discuss the evaluation and recommendation.

### First Year Evaluation

Because faculty and student evaluations are not practical in the first few months of employment, the Department Head's annual evaluation shall stand as the TRC's recommendation regarding reappointment in the first year of faculty appointment.

### The Year of Tenure Application

The candidate shall apply for tenure in the year specified by the contract. Application is made by submitting the tenure portfolio with a cover memo requesting consideration for tenure by September 15<sup>th</sup> to the TRC chair and Department Head. The candidate's peer review team will present a brief summary of the candidate's tenure portfolio in a meeting of the TRC no later than October 15<sup>th</sup>. A recommendation regarding tenure will be made by the TRC, based on a simple majority vote conducted by secret ballot. The TRC chair shall forward the recommendation of the committee to the candidate by November 1. The recommendation will include one of the following:

1. Grant tenure, beginning with the start of the University's next academic year;
2. Grant one (1) additional non-tenured year during which the applicant must fulfill specific conditions that are determined by the Vice President for Academic Affairs following input from the TRC, Department Head, and Dean in order to be eligible for tenure. Upon completion of that conditional year, the tenure

application process will again be followed. In the event of denial of tenure, employment will be terminated at the end of the academic year in which tenure is denied; or

3. Deny tenure and terminate employment at the end of the next regular academic year as stipulated in the contract.

The candidate will have an opportunity to meet with the TRC to discuss the recommendation, if desired, as stipulated in the contract. The final recommendation will be forwarded to the department head by November 20<sup>th</sup>.

## Flowchart for tenure process each year:

<b>Date</b>	<b>Event</b>	<b>Comment</b>
During previous academic year	At least two teaching evaluations conducted by the peer review team during the prior year with a report sent to the candidate. <u>The candidate must schedule all teaching evaluations on dates mutually agreed upon by the peer review team involved.</u>	Visits not <u>required</u> prior to the first year report. Also visits are not required during year of application for tenure since no report will be written the following year.
September 1	<p style="text-align: center;">↓</p> TRC chair requests that tenure portfolio be submitted by the candidate to peer review team members.	
September 15	<p style="text-align: center;">↓</p> Candidates submit portfolio to peer review team members.	
October 1	<p style="text-align: center;">↓</p> Peer review team submits their report to the candidate and to the TRC chair.	
by October 15th	<p style="text-align: center;">↓</p> The TRC votes on granting tenure for candidates in their application year or granting reappointment for other candidates.	
November 1	<p style="text-align: center;">↓</p> TRC chair writes and forwards memos to candidates regarding continuance in the tenure process or granting of tenure.	
Prior to November 10th	<p style="text-align: center;">↓</p> Meetings requested by candidates with the TRC are conducted for review of the recommendation, if desired.	
November 20th	<p style="text-align: center;">↓</p> Final report is forwarded by the TRC chair to the department head.	

## Appendix A

Information should be supplied to the committee in the following areas: Teaching/Advising, Research/Scholarly Endeavors, and Service. It is anticipated that the information supplied will reflect a quality of individuality; therefore it is unlikely that one individual will excel in all three areas. At the time of tenure application, the minimal levels of activity in each of the three areas are as follows:

### Teaching

- No consistent shortcomings on student evaluations
- Evidence of efforts at self-development in the area of teaching
- Peer evaluations without major shortcomings by the end of the tenure period

### Scholarly Activity

- At least one peer reviewed publication, presentation, or poster at the state or national level
- Evidence of other scholarly activity such as presentations and/or publications

### Service

- Evidence of effectiveness in the practice site
- Activity in professional, university, or community organizations or committees

The minimum requirement activities must occur while employed at Ferris State University in order to count towards tenure. A candidate should not perform only at the minimum level in all three areas.

The following checklist is to serve as examples of appropriate information to provide for the committee. It would be of great assistance if the information were organized in the order listed. It is highly unlikely that there will be information for each individual item.

With the exception of Publications, the items below are not listed in any particular order.

#### I. Teaching/Advising:

- A. Student opinion relating to faculty performance preferably supported by formal student evaluations.
- B. Statements by peers (both in and/or out of the College of Pharmacy) relating to an individual faculty members depth of understanding of his/her field and his/her ability to convey this understanding to other people.
- C. Development of new programs, courses, and teaching methods.
- D. College awards for teaching excellence.
- E. Invitations to lecture at other colleges and professional organizations.
- F. Student counseling and advising activities.
- G. Special tutorial assistance to students.
- H. Advisor to student organizations
- I. Participation in teachers' seminars
- J. Teaching and adjunct appointments in other institutions.

## II. Research / Creative and Scholarly Endeavors

### A. Publications (provide reprints or copies where applicable)

1. Publication of original research in refereed journals
2. Publication of case reports, reviews, etc. in refereed journals
3. Publication of books or monographs
4. Editor for book or journal
5. Audiovisual programs
6. Articles in non-refereed journals
7. Editorial board or referee for professional or scientific journal.
8. Letters to the editor and book reviews
9. Publications in preparation and publications submitted, but not accepted.

\* In general the above types of publications are listed in order of importance

### B. Papers presented at Scientific or Professional Meetings (copies of abstracts should be provided)

- In general, papers will be weighted as follows:
  1. National > Regional > State and Local
  2. Reviewed > Non-reviewed
  3. Original Work > Review Paper

Abstracts are considered only as adjuncts to papers presented and should not be listed under publications. Attendance at meetings is not considered as scholarship.

### C. Invited Lectures

1. Presentations to university groups, government agencies, professional organizations and industrial organizations which impart specific knowledge in a scientific and/or professional area of expertise. Presentations to groups made up wholly of students are not included but are considered under "Teaching."
2. Does not include College of Pharmacy-sponsored or co-sponsored Continuing Education which is considered under "Service" and "Teaching."
3. Does not include chairing sessions at meetings unless a presentation is made. Chairing sessions at meetings is considered under "Service."

### D. Creative Endeavors in Education and Professional Practice

1. Evidence that the clinical practice has influenced the nature of other types of health care delivery (e.g. prescribing of physicians, medication administration by nurses)
2. Development of new or innovative types of pharmacy service.
3. Specialty Certification.
4. Participation in continuing education as a lecturer, author, or as a developer of other educational materials (i.e. audio-visual presentations, self paced computer course, etc.)
5. Serving as a consultant to organizations and agencies in the field of Pharmacy or related basic science disciplines.

#### E. Grants and Contracts

It is desirable that faculty pursue grants and contracts. Please provide letters of confirmation and the following information:

1. Approval of funding
2. Amount of funding
3. Grant or funding agency
4. Scientific merit of proposal
5. Degree of participation in a joint proposal

#### F. Consulting

Advisement of governmental agencies, industry, professional groups, or serving as an expert witness

#### G. Patents (please provide a copy)

Authorship of a patent in the faculty member's field is considered as evidence of creative scholarship.

#### H. Honors and Awards

1. Honorary Degrees
2. Awards recognizing professional and/or scientific achievements
3. Fellowship in professional and/or scientific organizations
4. Lecturing or Research Scholarships (e.g. Fulbright)

### III. Service

- A. Service to the University and to the School of Pharmacy (e.g. Faculty Senate membership, committee assignments, student activities, etc.)
- B. Service to the pharmacy profession. Identified by time and effort given to local, state, regional, national, or international professional organizations.
- C. Service at the site of practice.
- D. Service through presentations in practitioner Continuing Education programs
- E. Professional service to the community (drug education lectures, poison prevention, etc.)

Letters of thanks or acknowledgement are helpful but not required documentation for service.

## **Appendix B**

### **Characteristics of a Good Teacher**

It is expected that the faculty member will show competence in all five of the following areas.

1. Communication Skills
  - (a) Enthusiastic and dynamic
  - (b) A good speaker with good delivery
  - (c) Presents subject matter in a clear, concise manner
  
2. Stimulation of Thinking
  - (a) Utilizes teaching methods that foster decision-making skills and evaluation and application of knowledge.
  - (b) Stimulates students to pursue professional interests beyond the minimum requirements in the classroom, practice site, or laboratory.
  
3. Interaction with Students
  - (a) Motivates Students
  - (b) Sensitive to student needs
  - (c) Demonstrates patience
  - (d) Fair and impartial
  - (e) Attentive to student comments and questions
  - (f) Skilled in observing student reactions
  
4. Knowledge
  - (a) Incorporates current concepts and recent developments in the discipline into course materials.
  - (b) Discards outmoded concepts or places them in proper perspective
  
5. Course management
  - (a) Develops course objectives and presents them to students
  - (b) Teaching and testing are consistent with course objectives
  - (c) Presents material in an organized manner
  - (d) Develops and uses educational materials appropriately



**Appendix C**  
**Outline for tenure evaluation report**

**Overview**

Teaching

- A. Student Evaluations
- B. Faculty Evaluations
- C. Other information

Advising

Scholarly Activities

Service

Additional information

Conclusion/Recommendation

### **Post-Tenure Review Policy and Procedures**

The policy establishes the university-wide standards for performance appraisal and provides for department/unit adaptation of the standards. It establishes the procedures for review of the teaching, scholarship and service responsibilities of faculty members using those standards. In addition, it provides a mechanism for development of university-wide student assessment of instruction.

#### **A. Standards**

1. The university-wide standards describe the level of performance expected of faculty members in the areas of teaching, scholarship, and service. It is recognized that there are variations in faculty assignments, teaching styles and interests. Moreover, it is recognized that pedagogy and methodology may differ between departments. For that reason, not all of the standards may be applicable for review of a given faculty member. However, because of the importance of the tenured faculty to the University, these persons should demonstrate capability in the three areas previously mentioned using the unit-specific standards derived from the university-wide standards given below:

#### **Teaching**

- Meets expected program/departmental outcomes/objectives for the course taught.
- Is knowledgeable of current developments in one's discipline and retains clinical/professional competence as appropriate.
- Demonstrates consistency in the application of a defined teaching methodology.
- Meets individual student needs through established office hours and advising of designated student advisees.
- Presents material in an organized fashion.
- Provides course guidance by a syllabus with course outline, objectives, basis for evaluation, and grading policy.
- Evaluates student learning consistent with course objectives.
- Provides timely and corrective feedback to students.
- Maintains a classroom atmosphere that is conducive to learning and respectful of differences.
- Participates in departmental deliberations on curricular and pedagogical matters.

#### **Scholarship**

- Participates in curriculum innovation and development.
- Demonstrates evidence of scholarly activity including research, creative activity, or application of research or pedagogy in one's discipline or area of professional responsibility.
- Remains current in the field as evidenced by attending professional meetings, giving presentations, or publishing papers.
- Participates in professional development activities and demonstrates continued professional growth.

## Service

- Serves on departmental, college and University committees.
- Is a member of appropriate professional organizations?
- Participates in community activities that are professionally related.
- Engages in voluntary service to the University community including student organizations.

## **B. Post-tenure Review Process Original Documentation**

1. During the first part of the 1998-99 academic year, the colleges/departments will adapt the university-wide standards of performance to reflect the specific needs of the college/department, such as standards for clinical instruction, consulting, program and accreditation review, etc. By February 1, 1999, the department head or equivalent, providing an opportunity for input from the faculty, will submit proposed modifications to the standards for approval to the dean or the Vice President for Academic Affairs (VPAA), if there are no department heads. If the majority of the faculty agrees on the unit specific adaptations, that information shall be forwarded to the dean by the faculty. The dean or VPAA shall approve or modify the unit-specific standards on or before March 1, 1999. If they do not adopt the standards submitted by the department head or equivalent, the dean or VPAA must inform the faculty, in writing, of the reasons for modifying the proposed standards.
2. A list of the recommended components of the faculty portfolio for the department/college will be submitted to the dean for information by March 1, 1999. The department head or equivalent will develop the list after actively seeking input from the faculty. If the majority of the faculty agrees on the components of the portfolio, that information shall be forwarded to the department head or equivalent by the faculty. In addition to student assessment of instruction, the portfolios may include a current resume, faculty self-assessment, faculty peer review, administrative observation, and other supporting documentation. These portfolios will be utilized for all reviews conducted after July 1, 1999. The department head must inform the faculty, in writing, of the reasons if the list of portfolio components adapted by the faculty is not adopted.
3. Standards of expected performance in areas other than scholarship and service have yet to be developed for the librarians and counselors. These standards will be developed by a representative group of faculty members and administrators appointed by the VPAA. The VPAA will appoint the committee by May 15, 1998. The committee will submit standards to the VPAA by September 1, 1998. The VPAA will accept or modify the standards by October 1, 1998. The standards for counselors and librarians will then be adapted as given in Section 2 above.
4. The reviews of the first group of faculty will be undertaken during the 1998-99 academic year. By May 8, 1998, the department head or equivalent administrator, with input from the faculty, submits the initial order in which tenured faculty members will be reviewed to the dean. The initial schedule should provide that all tenured faculty members are reviewed once within a four-year period. The department head or equivalent administrator shall solicit volunteers for review prior to determining the initial list. This order should be flexible so faculty members desiring to combine post-tenure review with application for promotion/merit may request an early and concurrent post-tenure review. As additional faculty members become tenured, they will be added to the list so that they are reviewed in the fourth year after their tenure becomes effective.
5. By May 15, 1998, their respective deans will officially notify faculty members scheduled for post-tenure review during the 1998-99 academic year. The faculty members will receive a copy of the university-wide standards. They will submit material similar to that required by the promotion/merit committee in their respective units but directed to the list of university-wide standards describing

the level of performance expected of faculty members in the areas of teaching, scholarship, and service. In all subsequent years, the notification will be done by May 1.

6. On or before December 1, the faculty member being reviewed shall submit his/her portfolio to the evaluator. In many cases, the evaluator will be the department head. In those colleges where there are no departments, the dean or another administrator designated by the dean will be the evaluator. It is recognized that data from the University-wide standardized student assessment of instruction instrument will not be available for reviews in the 1998-99 academic year.
7. On or before January 30, the evaluator will meet individually with faculty members to discuss the post-tenure review evaluation. The individual faculty member shall receive a preliminary copy of the post-tenure review evaluation at least ten working days before the meeting is scheduled. This session will include a discussion of progress toward meeting program/departmental/ college goals and exploration of faculty development opportunities that might be appropriate.

The review will indicate the faculty member's strengths and weaknesses. The evaluator may state that the performance exceeds department/unit expectations.

Each faculty member being reviewed will develop a written document outlining goals for the faculty member for the coming review cycle; a mechanism for determining progress toward those goals will be included. This document will be developed in consultation with the evaluator involved. This information in the development plan will be used as the basis for the next evaluation. If performance in a given area is deemed deficient, the next review may be scheduled as soon as one year or up to four years in the future. The faculty member will receive a copy of the plan and will sign the development plan indicating that the plan has been discussed with the faculty member. A faculty member may request that another faculty member attend the discussion of the post-tenure review evaluation. The faculty member who disagrees with all or part of the evaluation has fifteen working days from the date of the meeting to respond to the evaluation in writing to the evaluator. The post-tenure review evaluations and written responses, if any, will be forwarded to the dean or the next highest administrator on February 21.

Also if the faculty member disagrees with the evaluation, he/she may request a meeting with the next highest administrator. This request must be made within 15 working days of the meeting with the evaluator. Upon such a request, the administrator shall meet with the faculty member to discuss the review within 15 working days of the request. The administrator will give the faculty member a written response to his/her areas of disagreement within 15 working days of the meeting. This appeal right is limited to one level above the evaluator.

8. The dean shall submit his/her report on the post-tenure review process to the VPAA on or before March 15. On completion of the process, the portfolio is returned to the faculty member. The dean will forward the post-tenure review evaluation and the faculty response, if any, to HRD for placement in the faculty member's official file. All correspondence resulting from review by the next highest administrator will also be placed in the official file in HRD. The original evaluation and all subsequent correspondence will be considered to be the post-tenure review.
9. On or before April 15, the VPAA will report on the post-tenure review process to the President.

### **C. Summary of Calendar After the First Year**

**May 1** -The dean notifies faculty members that they will be reviewed the following year and provides them with a copy of the departmental/college expectations and a list of material to be included in the portfolio.

**December 1**- Portfolios for evaluation are submitted to the evaluator. Data from student assessment of instruction must be considered in the evaluation.

**January 30** - Last day to hold the meeting between administrator and faculty member to discuss post-tenure review evaluation. Faculty member must receive a preliminary post-tenure review evaluation at least ten working days prior to the scheduled meeting. Faculty member must submit written response within fifteen (15) working days of the meeting to be included as part of the post-tenure review evaluation.

**February 21** -Evaluator forwards post-tenure review evaluation and the written response of the faculty, if one exists, to the Dean or VPAA if appropriate.

**March 15** - The Dean forwards his/her report on post-tenure review to VPAA.

**April 15** -The VPAA will report on post-tenure review process to the President.

### **D. Student Assessment of Instruction Original Documentation**

Prior to May 15, 1998, the VPAA and the president of the Academic Senate will appoint a joint committee composed of individuals from the Deans' Council and the Academic Senate to make recommendations on the selection of an instrument for student assessment of instruction. The committee may recommend a nationally normed instrument or develop a Ferris-specific instrument. The committee will recommend an evaluation process including but not limited to the frequency of evaluation, the classroom administration of the evaluations, the compilation of the data from the evaluations, and the mechanism for sharing that information. The VPAA will submit the recommendations to the Deans' Council and the Academic Senate for advice by September 1, 1998. The VPAA shall approve selection of the instrument and the evaluation process no later than October 1, 1998 so that the instruments can be used during the Fall 1998 semester. Additional questions may be added by the department/unit.

### **E. Summary of Calendar After the First Year**

**By October 1** - Results of Spring semester student assessment of instruction provided to faculty members.

**November 1/December 1** - Fall semester student assessment of instruction instruments administered.

**By March 1** - Results of Fall semester student assessment of instruction provided to faculty members.

**April 1 - April 20** - Student assessment of instruction instruments are administered in Spring semester classes.

## Appendix 25.4

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Ferris State University  
College of Pharmacy  
Promotion/Merit Policy

Approved by the Promotion Committee on June 2, 2009.

Amended by the Promotion Committee on Aug. 11, 2009

Approved by the Dean of College of Pharmacy August 11, 2009

Section I.	Philosophy
Section II.	Composition of the Committee
Section III.	Procedure
Section IV.	Promotion Guidelines
Section V.	Merit Increase
Section VI.	Evaluation Criteria
Section VII.	Policy Review

### I. Philosophy

Since the College of Pharmacy is primarily concerned with educating future pharmacists, it is the intent of this policy that teaching be given priority over all other activities when considering an individual for promotion/merit. Nevertheless, this policy recognizes the importance of the professional and scholarly activities of the faculty, as well as their service to the College, University, profession, higher education, and community. It is further the intent of this policy that an individual meeting the qualifications listed below at a level of competence appropriate to the rank should be promoted/granted a merit increase in salary.

It is anticipated that the composite accomplishments of a candidate for promotion or merit will reflect an academic individuality with commensurate qualities, and that it is likely that any given candidate will meet only a portion of the listed promotion criteria, i.e., the criteria fulfilled vary from one candidate to the other. It is the responsibility of the Promotion/Merit Committee (hereinafter referred to as "Committee") to recognize that members of the faculty have different roles, interests, and expertise in carrying forward the missions of the Department, College and the University.

Faculty members of Ferris State University College of Pharmacy are assigned to one of the following instructional ranks: instructor, assistant professor, associate professor, or professor. The minimum qualifications for each of the four ranks are defined hereafter.

Promotion in rank or granting of a merit increase in salary will be recommended for those faculty members, who have met these qualifications, as judged by the Committee.

### II. Composition of the Committee

1. The Committee will consist of three tenured pharmaceutical sciences faculty and three tenured pharmacy practice faculty.
2. The dean will select up to 50% of the faculty members for the committee (per the contract). The dean will convey his/her appointees to the faculty no later than the end of the first week of Fall Semester classes.
3. After the dean's selections, by the end of September each department will provide faculty as necessary to reach the required membership numbers.
4. The members on the Committee will elect one of their own to serve as chair until the next committee is selected.

### III. Procedure

1. The chair of the Committee shall advise the faculty of the timelines in this policy at the August all-college faculty meeting each year.
2. Faculty members who have met the credentialing and years-in-rank requirements are eligible to apply for promotion/merit increase. They shall advise the chair in writing of their intent to apply by October 15 and shall provide, the official University letter confirming the date of the most recent promotion/merit and any other document relating to their eligibility for promotion/merit.
3. The Committee shall meet by October 31 to determine the eligibility of the applicants.
4. In the event that a faculty member is found to be ineligible to apply, he/she shall be informed in writing of the committee's decision along with the reasons by November 7. If such an applicant wishes to petition the Committee for reconsideration of its decision, he/she shall submit in writing his/her reasons by November 15. The Committee shall render a decision on the petition and the chair shall advise the faculty member concerned of the decision by November 21. The decision of the Committee shall stand as delivered.
5. Promotion/merit increase portfolios plus all supporting documentation, including recommendation letters, must be received by the chair no later than 5:00 pm on Friday of the final week of classes in December.
6. Each eligible applicant shall be given written notification of the committee's recommendation by its chair by March 1. Unranked applicants shall be informed by the Committee as to the reasonable and proper conditions which might result in a favorable recommendation in the future. No redress shall be granted relevant to priority placement on the list of applicants recommended for promotion/merit.
7. Any unranked applicant who feels that he/she has adequate reason for redress may petition the Committee in writing for an opportunity to present his/her case

for further consideration. The petition shall be sent to the chair and a panel shall be formed to deliberate on the petition. The panel shall consist of the chair, the dean, and a tenured faculty member not serving on the Committee who is agreeable to both the Committee and the applicant seeking redress. If a favorable decision on the petition is rendered by the panel, the name of the petitioning applicant will be resubmitted to the Committee for inclusion on the list of applicants recommended for promotion/merit. A majority decision shall stand as delivered.

8. The chair shall submit to the dean, by April 1, the Committee's recommendation consistent with the promotion and merit increase section of the current FSU and FFA/MEA/NEA Agreement.

#### IV. Promotion Guidelines

The minimum time requirement of academic experience in a rank refers to years at the College of Pharmacy with the following exception: Individuals hired with previous experience at their present rank in other institutions may have 50 % of the prior service in that rank count toward the required time. In no case will experience outside FSU count for more than two years (or one year in the case of the rank of instructor); also, no credit for any such experience of less than one year will be granted. Documentation of the said experience must be included in the applicant's portfolio when exercising this option. Bargaining unit members at less than full time will accumulate time towards promotion at a rate consistent with their reduced appointment (example: At the end of one year at 0.5 FTE rank, they have accumulated 0.5 years of time towards promotion).

##### A. Instructor (minimum qualifications)

1. Good scholarship as demonstrated by their academic record.
2. Demonstrated competence in the field of teaching assignment, preferably signified by the completion of at least a master's degree.
3. Sufficient teaching and/or work experience to demonstrate potential for success as a teacher and advisor of students.
4. Professional registration or licensure where applicable.

##### B. Assistant Professor (minimum qualifications)

1. Completion of a Ph.D. degree in the field of teaching assignment or a Pharm.D. degree plus a minimum of one year of residency or equivalent practice experience.
2. Demonstration of competence in the field plus a potential for success as a teacher and advisor of students.
3. Good scholarship as demonstrated by their academic record.
4. Potential for creative scholarly activity.



5. Evidence of continuing professional development.
6. Demonstration of involvement in service.

C. Associate Professor (minimum qualifications)

1. Completion of a Ph.D. degree in the field of teaching assignment or a Pharm.D. degree plus a minimum of one year of residency and/or pass any Board of Pharm. Specialty (BPS) exam (ex. BCPS, BCNP, BCPP, BCOP, or other) (whichever is more appropriate for area of teaching assignment)
2. A minimum of four years, including the year of application, at the rank of assistant professor.
3. Effective teaching
4. Effective advising.
5. Evidence of creative scholarly activity.
6. Potential for academic and intellectual leadership.
7. Demonstration of involvement in service.
8. Evidence of continuing professional development.

D. Professor (minimum qualifications)

1. A minimum of six years, including the year of application, at the rank of and meeting the qualifications for associate professor.
2. Effective teaching, preferably demonstrated by use of innovative instructional technology and multiple pedagogies.
3. Effective advising as evidenced by proactive mentoring and guidance of students.
4. Demonstration of creative scholarly activity.
5. Evidence of academic and intellectual leadership.
6. Demonstration of consistent involvement in service with definite indications of a significant level of responsibility and leadership.

V. Merit Increase

A merit increase, consistent with the guidelines in the Agreement between Ferris State University and the Ferris Faculty Association /Michigan Education Association / National Education Association (FSU-FFA/MEA/NEA) can only be given to those who cannot be advanced beyond their present rank based on academic credentials as defined in this policy, as well as those who are at the rank of professor. Faculty who have served a

minimum of four years since their last advancement in rank or prior merit increase are eligible to apply for a merit increase in the fifth year.

Recommendation for merit increase will be based on the following consideration:

The applicant will present to the Committee evidence of continuing excellence in the criteria descriptive of his/her current rank as exemplified by accomplishments over the period since their last promotion or merit including the year of application. Denial of recommendation by the Committee for a merit increase is not subject to redress and will be explained to the individual denied.

## VI. Evaluation Criteria

Quality is the key to promotion/merit at the FSU College of Pharmacy. Quality is assessed by the performance of faculty in three general areas of academic endeavor: teaching and advising, scholarly activities, and service. A candidate for promotion/merit should demonstrate notable performance in at least one of the areas of endeavor while demonstrating satisfactory performance in the others. It should be noted that promotion is based on the recognition of past performance, the level of performance since the most recent promotion, along with a reasonable assurance that the applicant is capable of even greater accomplishments. Consideration for a merit increase will be given only to accomplishments of the applicant since his/her last promotion, merit increase, or date of hire, whichever is more recent.

The activities associated with teaching, scholarship, and service stated below are not all inclusive. Recognizing the diversity of the faculty, the candidate is free to provide the Committee with any additional material, including letters from different sources, in support of the application. In addition to the documentation listed below, the candidate shall include in the portfolio an updated curriculum vitae. It is expected that the successful candidate will submit their materials in a well organized portfolio format that is clear and easy to follow. It can be created electronically, on readable media, or in hardcopy format.

Portfolios should include at a minimum the following sections and materials (see Appendix for further ideas):

- A. Teaching refers to classroom instructional activities as well as to individual or small group activities related to classroom or laboratory instruction. Teaching also refers to the supervision of students' clinical activities in any setting for the purpose of demonstration, delivery, or discussion of pharmacy-based care. Advising refers to both one on one advising of students as well as serving as an advisor to an organized student group.
11. A self-evaluation statement reflecting the candidate's philosophy regarding teaching, and the impact of such philosophy on student learning, and future plans for improvement.
  12. Summary of teaching activities clearly explaining specific coursework taught (number of hours), and course responsibilities (if you team teach/coordinate, what are you responsible for).
  13. Samples of instruction material that could include items such as course syllabi and objectives, handouts, PowerPoint presentations or overheads, and other documentation deemed appropriate.
  14. Summary of student evaluations of teaching.
  15. Development of new courses or revision of existing ones.
  16. Experiences with instructional technology and pedagogy.
  17. Student counseling and advising in academic performance and career options.
  18. Advising of student organizations.
  19. Advising individual students in the academic and professional domains.
  20. Letters from the candidate's tenure review committee, or other peer evaluations, if applicable.
  21. Any other relevant material such as honors and awards for teaching excellence, and authorship of teaching material.
- B. Scholarly activities refer to activities such as basic and applied research, scholarship of teaching, and professional development.
11. A statement of the candidate's philosophy of scholarship
  12. An overview of the candidate's scholarly activities.
  13. Reprints of publications.
  14. Research projects, both completed and in progress, including description of the candidate's role in the project.
  15. Listing of financial support for research, including funded and submitted grants.
  16. Presentations at scientific and professional meetings.

17. Serving as a journal referee or in other capacity that impacts dissemination of knowledge to the academic community at large.
18. Specialty certification in an area related to one's professional duties.
19. Development of innovative pharmacy services.
20. Attendance at professional meetings at the state, national, and international level.
21. Involvement in seminars, workshops, and meetings for professional development
22. Any other activity that reflects the candidate's involvement in any type of scholarship.

C. Service refers to any activity, not related to teaching and advising or scholarly activities, which are deemed beneficial to University, College, profession (including practice setting), higher education, and community.

6. A statement of the candidate's philosophy of service
7. A summary of the candidate's service related activities
8. College and University committees.
9. Local, state, and national professional and higher education organizations.
10. Local, state, and federal agencies.
11. Consultancy to private and public organizations.
12. Civic service and cultural organizations.
13. Clinics and hospitals, beyond teaching responsibilities.
14. Any other activity that reflects the candidate's involvement in any type of service.

## VII. Policy Review

This Promotion/Merit Policy is subject to periodic review and revision in accordance with the appropriate provisions of the current agreement between Ferris State University and the Ferris Faculty Association/MEA-NEA.

**APPENDIX 26.1**

**COLLEGE OF PHARMACY PROFESSIONAL DEVELOPMENT SESSIONS  
ACADEMIC YEARS 2003 – SPRING 2009**

<b>Date</b>	<b>Topic</b>	<b>Speaker(s)</b>
09/04/2003	Orientation to the College of Pharmacy	Drs. Stephen Durst & Eric Jarvi
09/22/2003	Preparing Lecture Materials	Drs. Mary Frances Ross & Craig Straley
10/23/2003	WebCT Basics	Drs. Craig Straley & Curtis Smith
11/19/2003	Distance Learning	Dr. Michael Klepser
12/17/2003	Being an Academician	Dr. Michael Klepser
01/29/2004	Developing Career Goals	Dr. Joan Rider
02/23/2004	Student-Faculty Interactions	Drs. John Jameson & Teresa Klepser
03/26/2004	Exam Writing and Assessing Student Learning	Dr. Joan Rider
04/28/2004	Maintaining Your Dossier and Teaching Portfolio	Dr. Michael Klepser
09/02/2004	Orientation to the College of Pharmacy Ropes Course	Drs. Steve Durst & Eric Jarvi
10/21/2004	Preparing Lecture Materials	Dr. Mary Frances Ross
11/22/2004	WebCT Basics	Drs. Kim Hancock & Vicki Sternhagen
01/20/2005	Assessment Workshop	Drs. Juliana Szilagyi & Jane Mort
02/17/2005	Distance Learning Workshop	Dr. Ulrich Chung
03/17/2005	Teaching Techniques	Dr. John Jameson
05/19/2005	Exam Writing & Assessing Student Learning	Mr. Terry Doyle
06/16/2005	1) Being an Academician 2) Developing Career Goals	Dr. Michael Klepser Dr. Stephen Durst
07/26/2005	1) Maintaining Your Dossier & Teaching Portfolio 2) Promotion & Tenure	Dr. Michael Klepser Dr. Curtis Smith
10/13/2005	Course Evaluations, Test Reports & Student Comments	Dr. Stephen Durst
11/22/2005	Clinical Seminar Papers	Dr. Doug Haneline

<b>Date</b>	<b>Topic</b>	<b>Speaker(s)</b>
02/08/2006	Transforming Health Professional Education	Dr. William Rutherford
03/08/2006	Cruise for Leadership	Mr. Roger Saadeh
04/05/2006	Teaching Statistics	Dr. Allison Bernknopf
05/10/2006	Using Technology to Teach	Drs. Michael Klepser & Craig Straley
06/14/2006	Writing Workshop	Dr. Michael Klepser
09/13/2006	Promotion & Tenure	Dr. Curtis Smith
10/11/2006	Organizing and Delivering Materials to Facilitate Student Learning	Dr. Mary Frances Ross
11/09/2006	Classroom Assessment Techniques	Mrs. Eleanor Dombrowski
12/18/2006	Teaching Secrets of Success: Golden Hammers and Silver Bullets	Mr. Todd Stanislav
01/10/2007	Faculty Development Discussion	Drs. Allison Bernknopf, Stephen Durst & Claire Saadeh
02/14/2007	Developing Career Goals and Being an Academician	Dr. Michael Klepser
03/14/2007	Student-Faculty Interactions	Drs. Jameson & Teresa Klepser
04/11/2007	Cultural Diversity	Mr. Raymond Gant
05/09/2007	Designing a Course Backwards	Drs. Kimberly Daugherty & Paul Thill
06/13/2007	Teaching Evidence Based Medicine	Dr. Allison Bernknopf

Professional Development Committee established as a full standing committee May 14, 2007.

<b>Date</b>	<b>Topic</b>	<b>Speaker(s)</b>
08/24/07	Education Scholar	Drs. Allison Bernknopf & Claire Saadeh
11/09/07	Technology: Respondus & Study Mate	Mr. Bill Knapp
12/17/07	Grant Writing: Part I	Dr. Alan Davis Faculty Panel – Drs. Mike Klepser & Dean Van Loo
01/21/08	Updates & Assistance from the FSU Grant Resource Center	Gretchen Spedowske & Enid Carlson-Nagel
03/12/08	Grant Writing: Part II	Enid Carlson-Nagel
07/14/08	Exam Writing	Terry Doyle
11/10/08	Interviewing Training (in conjunction with Assessment Committee)	Jill McCullough & Pamela Meadows
05/12-14/09	Accelerated Learning – Kick Off & Training	Gail Heidenhain, Delphin International

## Appendix 26.2

### Professional Development Programming: 2009-2010\*

<b>Orientation FSU / COP August 2009</b>	<b>Fall 2009 Teaching</b>		<b>Spring 2010 Scholarly Activity Professional</b>	
FCTL New Faculty Orientation August 17-21, 2009 (FSU Requirement)  Tenure Review (Provided online)  Promotion (Provided online)  +  EDUCATION SCHOLAR (Overview & Login Information) September 2009	August	<ul style="list-style-type: none"> <li>• Faculty Transitions (A) – August 24, 2009 (BR)</li> </ul>	January	<ul style="list-style-type: none"> <li>• Developing your Portfolio – January 5, 2010 (GR)</li> </ul>
	September	<ul style="list-style-type: none"> <li>• Developing your Experiential Clerkship (P) – September 8, 2009 (GR)</li> <li>• Pharmacotherapeutics Observation (P) – Fall semester 2009 (GR or K'zoo)</li> <li>• Technology Showcase (A) – September 14, 2009 (BR)</li> <li>• Learning from Theory to Practice – September 22, 2009 (GR)</li> </ul>	February	<ul style="list-style-type: none"> <li>• Leadership (A) – February 8, 2010 (K'zoo)</li> <li>• Developing Career Goals / Planning – February 16, 2010 (GR)</li> </ul>
	October	<ul style="list-style-type: none"> <li>• Writing Learner Centered Objectives – October 6, 2009 (GR)</li> <li>• Student Centered / Active Teaching Methods – October 23, 2009 (GR) [Note: FRIDAY]</li> </ul>	March	<ul style="list-style-type: none"> <li>• Research Opportunities – March 16, 2010 (GR)</li> <li>• Test Writing II – March 17, 2010 (Adobe Connect)</li> </ul>
	November	<ul style="list-style-type: none"> <li>• Assessment &amp; Feedback – November 3, 2009 (GR)</li> <li>• Developing Course Materials to Support Learning – November 17, 2009 (GR)</li> </ul>	April	<ul style="list-style-type: none"> <li>• Grant Support Services – April 19, 2010 (Big Rapids)</li> </ul>
	December	<ul style="list-style-type: none"> <li>• Exam Question Writing &amp; Analysis – December 1, 2009 (GR)</li> <li>• Brain Research/Development – December 21, 2009 (GR)</li> </ul>	May	<ul style="list-style-type: none"> <li>• Publishing / Presenting your Work (A) – May 11, 2010 (GR)</li> <li>• Your Year in Review – May 11, 2010</li> </ul>
			June / July / Fall 2010	<ul style="list-style-type: none"> <li>• Facilitating Large &amp; Small Group Teaching (A) – TBD COP Meeting date (BR)</li> </ul>

\*All programs listed are for those suggested for new faculty unless otherwise specified (**all faculty however are invited & encouraged to participate**)

A = All faculty P = Pharmacy Practice only GR = Grand Rapids (Time: 0900-1200) K'zoo = Kalamazoo BR = Big Rapids



## Appendix 26.3

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### Grant Opportunities Available through FSU

Grant Name	Purpose
Professional Development Grant	Promoting educational research, innovation, and experimentation.
Faculty Research Grant	Encouraging the development of scholarly research activity.
Timme Travel Grant	Additional support for faculty for travel to programs that allow further enrichment of teaching & learning skills.
Ferris Foundation Exceptional Merit Grants	Faculty interested in pursuing projects that demonstrate exceptional merit in advancing the mission of FSU.
Diversity on Campus – Faculty/Staff Mini Grants	Financial assistance for projects, workshops,, & activities that strengthen excellence in diversity & inclusion.
Alumni Board of Directors Scholarship Program	Offered through the COP Alumni Board of Directors to assist in enriching individual faculty members with three main areas: faculty development, research, and course development.

## Appendix 27.1

### Facilities Summary

Resource	Big Rapids Campus	Grand Rapids Instructional Site	Kalamazoo Instructional Site
Classrooms (capacity)	1 Auditorium (165)	1 Auditorium – shared (95)	1 Auditorium – shared (100)
	1 Classroom (150)	1 Classroom (90)	1 Classroom (60)
	1 Classroom (75)		
Laboratories – Instructional (capacity)	Cognitive Skills Lab	None	None
	Prescription Lab		
	Model Pharmacy		
Laboratories – Computer (stations)	40 stations	40 stations	32 stations
Laboratories – Research	3	None	None
Student Commons	Yes	Yes	Yes
Faculty Offices	15	6	6
Staff Offices	8		

## Appendix 28.1

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### FERRIS STATE UNIVERSITY COLLEGE OF PHARMACY EXPERIENTIAL EDUCATION AFFILIATION AGREEMENT

Agreement made this    **day of** , 200 , by and between    , located at    , hereinafter called Facility, and Ferris State University, a constitutional body corporate of the State of Michigan, located at 220 Ferris Drive, Big Rapids, Michigan 49307, hereinafter called the University.

WHEREAS, the parties wish and intend by this Agreement to set forth the terms and conditions of engaging in a program for the clinical education at the Facility of students enrolled in the University's College of Pharmacy.

IT IS THEREFORE AGREED AS FOLLOWS:

1. **Education Program.** The University shall, in consultation with representatives of the Facility, plan and administer the educational program for its students at the Facility and shall assume the following responsibilities:

A. The University shall provide the Facility with its overall plan for the use of clinical facilities at least one month prior to the commencement of each academic semester. The plan shall include details of the University's educational program at the Facility, including the objectives, and approximate number of students for each term, dates, times, and levels of each student's academic preparation. The University shall modify its educational program as necessary to accommodate the reasonable requirements of the Facility.

B. The University will provide the names of students as soon as possible after registration for each semester, but in no event later than one week before the beginning of the clinical experience program at the Facility.

C. The University agrees to provide pre-clinical instruction to each student, in accordance with standards mutually agreeable to the University and the Facility, and to present for clinical experience at the Facility only those students who have satisfactorily completed the pre-clinical instructional program.

D. The University shall instruct all of its students assigned to the Facility with regard to compliance with all rules, regulations, policies and procedures of the Facility, including but not limited to those relating to the confidentiality of patient and Facility records and information and to the responsibility and authority of the medical, nursing, and administrative staff of the Facility over patient care and Facility administration. The University shall instruct students of the importance of complying with all relevant state and federal confidentiality laws, including the Health Insurance Portability and Accountability Act of 1996 ("HIPAA"), to the extent applicable. In addition, the University shall advise students of the importance of complying with Facility's policies and procedures, relative to HIPAA. The University shall instruct all of its students that Facility identification badges must be worn at all times students are in the Facility.

E. The University shall maintain all educational records and reports relating to the educational program completed by individual students at the Facility, and the Facility shall have no responsibility respecting the same other than those agreed upon reports from clinical supervisors which are necessary to the University's monitoring of student progress. The timing and nature of such reports shall be described in the plan specified in Section 1.A. of this Agreement. The Facility shall refer all requests for information respecting such records to the University. The University agrees to comply with all applicable statutes, rules and regulations respecting the maintenance of and release of information from such records.

F. If requested by the Facility, the University shall instruct each student to provide the Facility with evidence that the student has passed a physical examination of a scope and within time periods satisfactory to both the Facility and the University, and such evidence shall indicate that at the time of the physical examination, the student was free from contagious diseases as nearly as could be ascertained by such examination. The University shall inform each student of the importance of having in force a policy of health insurance to defray the cost of Facility and medical care of any illness or injury that might be sustained while the student is participating in any clinical field work, and also shall inform each student of the substantial monetary liability that the student might incur as a result of failure to have such insurance in force.

G. The University shall have full responsibility for the conduct of any student disciplinary proceedings and shall conduct the same in accordance with all applicable statutes, rules, regulations and case law. Alleged violations of Facility policies and procedures, including violations of HIPAA shall be referred to the University for disciplinary action, as appropriate.

H. (i) No provisions of this Agreement shall prevent the Facility from refusing to accept any student who has previously been discharged for cause as an employee of the Facility, who has been removed from or relieved of responsibilities for cause by the Facility, or who would not be eligible to be employed by the Facility. The Facility shall notify the University in writing of its refusal to accept a student and the basis therefore.

(ii) The Facility may submit a written request to the University for the withdrawal of any student from the program for a reasonable cause related to the need for maintaining an acceptable standard of patient care, and the University shall immediately comply with such request. The written request from the Facility shall set forth the basis for removal.

(iii) In the event the University does not agree with the Facility's refusal to accept a student or request for withdrawal of a student, it shall promptly (in any event not later than five working days after receipt of the written notice or request from the Facility) provide the Facility with a written statement setting forth the basis for any such disagreement.

(iv) The Facility will defend, indemnify and hold the University harmless from any and all claims and costs arising from the Facility's request for the withdrawal of or refusal to accept any student to which the University provided its timely written statement of disagreement, provided that the Facility is determined by a court or administrative agency of competent jurisdiction to have acted in an unlawful manner in refusing to accept or requesting the withdrawal of a student; and further provided that the University shall promptly notify the Facility of any such claim, provide the Facility with all reasonable assistance, except financial, in making such defense. No settlement of any such claim as it relates to the University shall be effected without the consent of the Facility.

2. **Patient Care Program.** The Facility shall plan and administer all aspects of patient care at the Facility and shall assume the following responsibilities:

A. The Facility shall provide qualified supervision of University students during their clinical experience. Facility supervisory personnel may, in an emergency, or in certain cases based upon applicable standards of patient care, temporarily relieve a student from a specific assignment or require that such student leave an area or department pending a final determination of the future status of the student by the parties.

B. The Facility shall cooperate with the University in the planning and conduct of the students' clinical experience, to the end that the students' clinical experience may be appropriate in light of the University's educational objectives.

C. No provisions of this Agreement shall prevent any patient from requesting not to be a teaching patient or prevent any member of the Facility medical staff from designating any patient as a nonteaching patient.

D. The Facility shall make available to students the use of its cafeteria, conference rooms, dressing rooms and library as available and as required by the educational program and without charge except for food consumed by the students.

E. Students may use the emergency and outpatient services of the Facility for the medical care of themselves while they are participating in the educational program at the cost customarily charged to the general public for such services.

3. **General Provisions.** The parties mutually acknowledge and agree as follows:

A. The University agrees that statutory and common law theories and principles of indemnification, contribution, and equitable restitution shall govern and apply to claims, costs, actions, causes of action, losses or expenses (including attorney fees) resulting from or caused by the actions or omissions of the University, its employees and students pursuant to this Agreement. The Facility agrees that, except as provided in Section 1.H.(iv) hereof, statutory and common law theories and principles of indemnification, contribution, and equitable restitution shall govern and apply to claims, costs, actions, causes of action, losses or expenses (including attorney fees) resulting from or caused by the actions or omissions of the Facility or its employees pursuant to this Agreement.

B. The University shall provide or require that each student maintain professional liability insurance with policy limits satisfactory to the Facility and the University.

C. Each party shall be separately responsible for compliance with all laws, including antidiscrimination laws, which may be applicable to their respective activities under this program.

D. Students of the University shall not be deemed to be employees of the Facility for purposes of compensation, fringe benefits, workers' compensation, unemployment compensation, minimum wage laws, income tax withholding, social security or any other purpose, because of their participation in the educational program. Each student is placed with the Facility to receive clinical experience as a part of his or her academic curriculum; those duties performed by a student are not performed as an employee, but in fulfillment of these academic requirements and are performed under supervision. At no time shall students replace or substitute for any employee of the Facility. This provision shall not be deemed to prohibit the employment of any such student by the Facility under a separate employment agreement. The University shall notify each student of the contents of this paragraph.

E. There shall be no monetary consideration paid by either party to the other, it being acknowledged that the program provided hereunder is mutually beneficial. The parties shall cooperate in administering this program in a manner which will tend to maximize the mutual benefits provided to the University and Facility.

F. This Agreement is intended solely for the mutual benefit of the parties hereto, and there is no intention, express or otherwise, to create any rights or interests for any party or person other than the Facility and the University; without limiting the generality of the foregoing, no rights are intended to be created for any patient, student, parent or guardian of any student, employer or prospective employer of any student.

G. In the performance of their respective duties and obligations under this Agreement, each party is an independent contractor, and neither is the agent, employee or servant of the other, and each is responsible only for its own conduct.

H. This Agreement constitutes the entire agreement between the parties, and all prior discussions, agreements and understandings, whether verbal or in writing, are hereby merged into this Agreement.

I. No amendment or modification to this Agreement, including any amendment or modification of this paragraph, shall be effective unless the same is in writing and signed by the party to be charged.

4. **Term of Agreement.** This Agreement is effective as of the date set forth above and shall continue for a term of three (3) years. Either party may terminate this Agreement by providing the other party with a written notice of the termination of this Agreement, and such termination shall be effective forty-five (45) days from the date of the written notice. However, students participating in clinical instruction with the Facility shall be permitted to complete their clinical program with the Facility.

5. **Notice.** Any notice under this Agreement shall be directed to:

For the Facility:

For the University: Associate Dean/Department Head, Pharmacy Practice  
Ferris State University College of Pharmacy  
G500 – MERC  
1000 Monroe NW  
Grand Rapids, MI 49503

6. **Governing Law and Forum.** This Agreement shall be governed by, and construed under, the laws of the State of Michigan, which shall be the forum for any lawsuits arising from or incident to this Agreement.

IN WITNESS WHEREOF, the parties hereto have executed this Agreement as of the day and year first above written.

For the Facility:

For the University:

By: \_\_\_\_\_ By: \_\_\_\_\_

Name, Title,  
Facility Name

Ian W. Mathison, Dean  
College of Pharmacy

# FIRST ADDENDUM TO FERRIS STATE UNIVERSITY COLLEGE OF PHARMACY

## EXPERIENTIAL EDUCATION AFFILIATION AGREEMENT

This *First Addendum to Ferris State University College of Pharmacy Experiential Education Affiliation Agreement* (hereinafter called First Addendum) is made this \_\_\_\_ day of \_\_\_\_\_, 2008, by and between Ferris State University, a constitutional body corporate of the State of Michigan, located at 220 Ferris Drive, Big Rapids, Michigan 49307, (hereinafter called the University), and \_\_\_\_\_, located at \_\_\_\_\_ (hereinafter called Facility) and is made a part of the *Ferris State University College of Pharmacy Experiential Education Affiliation Agreement* between the University and Facility dated \_\_\_\_, \_\_\_\_, (hereinafter called Agreement). The Agreement is attached to this First Addendum.

### Agreement

IN CONSIDERATION of the covenants contained herein, the University and Facility mutually agree as follows:

1. In the event of any conflict or inconsistency between the Agreement and this First Addendum, the parties agree that this First Addendum shall control.
2. The following is added to the second paragraph of the Agreement: Students identified by the University and enrolled in the University's Advanced Pharmacy Practice Experiences (PHPR \_\_\_\_, PHPR \_\_\_\_, and selected elective experiences) shall be assigned to Facility for completion of all components of the courses listed above and identified by the University's printed goals and objectives for the course. In addition, the Facility will assist the University in continued refinement of the PHPR \_\_\_\_ Clerkship through collaboration with College of Pharmacy faculty members.
3. The following is added at the end of Section 1.B.:  
Assignment of students during any of the College of Pharmacy's scheduled experiential periods will occur only with the agreement of both parties. The University will compensate Facility at a rate of \_\_\_\_\_ Dollars (\$\_\_\_\_) for each clerkship month for each student assigned to the Facility, payable at the conclusion of the applicable semester(s): December 31 (Fall semester), May 31 (Spring semester), August 31 (Summer semester)..
4. The following section is added at the end of Section 1. E.:  
Facility acknowledges that it has access to student education records that are legally protected under the Family Educational Rights and Privacy Act of 1978, as amended (FERPA) and agrees to ensure that student education records are not disclosed without written permission of the student, or such action is covered by exceptions permitted by FERPA.

5. The first sentence of Section 2.A., "~~The Facility shall provide qualified supervision of University students during their clinical experience.~~", is deleted and replaced with the following:

An on-site coordinator of the experiential program will be identified by the Facility. The coordinator will be responsible for qualified supervision of University students during their clinical experience, ensuring that all educational goals and objectives are met and that all necessary grading is completed in a timely manner. Facility shall provide access to its patients and patient records for clinical education, all necessary instruction and preceptorship, as well as evaluation of the students' performance in order to determine a grade for the above listed courses.

6. The first sentence of Section 3. E., "~~There shall be no monetary consideration paid by either party to the other, it being acknowledged that the program provided hereunder is mutually beneficial.~~", is deleted.

IN WITNESS WHEREOF, the parties have signed this *First Addendum to Ferris State University College of Pharmacy Experiential Education Affiliation Agreement* by their authorized officers or agents on the date first mentioned above.

For the Facility:

For the University:

By: \_\_\_\_\_

By: \_\_\_\_\_  
Ian W. Mathison, Dean  
College of Pharmacy



## Appendix 28.2

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### FERRIS STATE UNIVERSITY COLLEGE OF PHARMACY EXPERIENTIAL EDUCATION WITH ON-SITE FACULTY AFFILIATION AGREEMENT

Agreement made this \_\_\_\_ day of \_\_\_\_\_, 200\_\_\_\_, by and between \_\_\_\_\_ located at \_\_\_\_\_ hereinafter called Facility, and Ferris State University, a constitutional body corporate of the State of Michigan, located at 220 Ferris Drive, Big Rapids, Michigan 49307, hereinafter called the University.

WHEREAS, the parties wish and intend by this Agreement to set forth the terms and conditions of engaging in a program for the clinical education at the Facility of students enrolled in the University's College of Pharmacy.

IT IS THEREFORE AGREED AS FOLLOWS:

1. **Education Program.** The University shall, in consultation with representatives of the Facility, plan and administer the educational program for its students at the Facility and shall assume the following responsibilities:

A. The University shall provide the Facility with its overall plan for the use of clinical facilities at least one month prior to the commencement of each academic semester. The plan shall include details of the University's educational program at the Facility, including the objectives, and approximate number of students for each term, dates, times, and levels of each student's academic preparation. The University shall modify its educational program as necessary to accommodate the reasonable requirements of the Facility.

B. The University will provide the names of students as soon as possible after registration for each semester, but in no event later than one week before the beginning of the clinical experience program at the Facility.

C. The University agrees to provide pre-clinical instruction to each student, in accordance with standards mutually agreeable to the University and the Facility, and to present for clinical experience at the Facility only those students who have satisfactorily completed the pre-clinical instructional program.

D. The University shall instruct all of its students assigned to the Facility with regard to compliance with all rules, regulations, policies and procedures of the Facility, including but not limited to those relating to the confidentiality of patient and Facility records and information and to the responsibility and authority of the medical, nursing, and administrative staff of the Facility over patient care and Facility administration. The University shall instruct students of the importance of complying with all relevant state and federal confidentiality laws, including the Health Insurance Portability and Accountability Act of 1996 ("HIPAA"), to the extent applicable. In addition, the University shall advise students of the importance of complying with Facility's policies and procedures, relative to HIPAA. The University shall instruct all of its students that Facility identification badges must be worn at all times students are in the Facility.

E. The University shall maintain all educational records and reports relating to the educational program completed by individual students at the Facility, and the Facility shall have no responsibility respecting the same other than those agreed upon reports from clinical supervisors which are necessary to the University's monitoring of student progress. The timing and nature of such reports shall be described in the plan specified in Section 1.A. of this Agreement. The Facility shall refer all requests for information respecting such records to the University. The University agrees to comply with all applicable statutes, rules and regulations respecting the maintenance of and release of information from such records.

F. If requested by the Facility, the University shall instruct each student to provide the Facility with evidence that the student has passed a physical examination of a scope and within time periods satisfactory to both the Facility and the University, and such evidence shall indicate that at the time of the physical examination, the student was free from contagious diseases as nearly as could be ascertained by such examination. The University shall inform each student of the importance of having in force a policy of health insurance to defray the cost of Facility and medical care of any illness or injury that might be sustained while the student is participating in any clinical field work, and also shall inform each student of the substantial monetary liability that the student might incur as a result of failure to have such insurance in force.

G. The University shall have full responsibility for the conduct of any student disciplinary proceedings and shall conduct the same in accordance with all applicable statutes, rules, regulations and case law. Alleged violations of Facility policies and procedures, including violations of HIPAA shall be referred to the University for disciplinary action, as appropriate.

H. (i) No provisions of this Agreement shall prevent the Facility from refusing to accept any student who has previously been discharged for cause as an employee of the Facility, who has been removed from or relieved of responsibilities for cause by the Facility, or who would not be eligible to be employed by the Facility. The Facility shall notify the University in writing of its refusal to accept a student and the basis therefore.

(ii) The Facility may submit a written request to the University for the withdrawal of any student from the program for a reasonable cause related to the need for maintaining an acceptable standard of patient care, and the University shall immediately comply with such request. The written request from the Facility shall set forth the basis for removal.

(iii) In the event the University does not agree with the Facility's refusal to accept a student or request for withdrawal of a student, it shall promptly (in any event not later than five working days after receipt of the written notice or request from the Facility) provide the Facility with a written statement setting forth the basis for any such disagreement.

(iv) The Facility will defend, indemnify and hold the University harmless from any and all claims and costs arising from the Facility's request for the withdrawal of or refusal to accept any student to which the University provided its timely written statement of disagreement, provided that the Facility is determined by a court or administrative agency of competent jurisdiction to have acted in an unlawful manner in refusing to accept or requesting the withdrawal of a student; and further provided that the University shall promptly notify the Facility of any such claim, provide the Facility with all reasonable assistance, except financial, in making such defense. No settlement of any such claim as it relates to the University shall be effected without the consent of the Facility.

I. The University shall employ and designate a full-time qualified pharmacist faculty member of the University to be responsible for the clinical clerkship pharmacy education program in the Facility. The University shall employ for this Educational Program only administrative and instructional staff who meet the applicable qualifications. As the faculty member is employed solely by the University, the University reserves the right to make the final selection of the faculty person to be employed. The faculty member's prioritized responsibilities in the institution will be: (1) pharmacy student education and evaluation; (2) patient directed clinical pharmacy services and evaluation; (3) appropriate scholarly activities; and (4) staff-oriented clinical pharmacy services and evaluation.

J. The University will determine to discipline, terminate, reassign, and reinstate such personnel in its reasonable discretion.

K. The University will assign to the Educational Program only faculty who agree to follow Facility rules and regulations even though they are not Facility employees.

L. The University will provide representatives from the University's faculty to serve on Facility committee(s) at the request of the Facility.

2. **Patient Care Program.** The Facility shall plan and administer all aspects of patient care at the Facility and shall assume the following responsibilities:

A. The Facility shall provide qualified supervision of University students during their clinical experience. Facility supervisory personnel may, in an emergency, or in certain cases based upon applicable standards of patient care, temporarily relieve a student from a specific assignment or require that such student leave an area or department pending a final determination of the future status of the student by the parties.

B. The Facility shall cooperate with the University in the planning and conduct of the students' clinical experience, to the end that the students' clinical experience may be appropriate in light of the University's educational objectives.

C. No provisions of this Agreement shall prevent any patient from requesting not to be a teaching patient or prevent any member of the Facility medical staff from designating any patient as a nonteaching patient.

D. The Facility shall make available to students the use of its cafeteria, conference rooms, dressing rooms and library as available and as required by the educational program and without charge except for food consumed by the students.

E. Students may use the emergency and outpatient services of the Facility for the medical care of themselves while they are participating in the educational program at the cost customarily charged to the general public for such services.

F. The Facility will be responsible to inform the University of any changes in relevant Facility staff or administration or procedures.

G. The Facility will provide University faculty with written policies, procedures, standards of care and protocols of the Facility.

H. The Facility will provide the following to the University's faculty:

(i) A private office in the Facility that is easily accessible by students and is located to encourage utilization by medical and pharmacy staff as well as patients. Such office shall include the appropriate office furnishings (desk and chair, file cabinet[s], bookcase[s], etc.), private telephone line (voice mail if available) and modem line, and computer network and "internet" access if available;

(ii) Access to conference rooms with audiovisual support (equal prioritization with other hospital departments);

(iii) Access to the pharmacy and drug distribution areas.

(iv) Access to all medical library services including literature searches and interlibrary loans and access to all drug information resources contained in the pharmacy department (if applicable);

(v) Assistance from pharmacy staff in absence of faculty member (limited to scheduled vacations, on-campus meetings or teaching, etc.) and integration into department activities including appropriate orientation and training;

(vi) Secretarial assistance as needed and access to photocopying machine(s) and FAX machine(s);

(vii) Access to cafeteria without charge except for food consumed by the University's faculty; and

(viii) Parking space for University faculty.

3. **General Provisions.** The parties mutually acknowledge and agree as follows:

A. The University agrees that statutory and common law theories and principles of indemnification, contribution, and equitable restitution shall govern and apply to claims, costs, actions, causes of action, losses or expenses (including attorney fees) resulting from or caused by the actions or omissions of the University, its employees and students pursuant to this Agreement. The Facility agrees that, except as provided in Section 1.H.(iv) hereof, statutory and common law

theories and principles of indemnification, contribution, and equitable restitution shall govern and apply to claims, costs, actions, causes of action, losses or expenses (including attorney fees) resulting from or caused by the actions or omissions of the Facility or its employees pursuant to this Agreement.

B. The University shall provide or require that each student maintain professional liability insurance with policy limits satisfactory to the Facility and the University.

C. Each party shall be separately responsible for compliance with all laws, including antidiscrimination laws, which may be applicable to their respective activities under this program.

D. Students of the University shall not be deemed to be employees of the Facility for purposes of compensation, fringe benefits, workers' compensation, unemployment compensation, minimum wage laws, income tax withholding, social security or any other purpose, because of their participation in the educational program. Each student is placed with the Facility to receive clinical experience as a part of his or her academic curriculum; those duties performed by a student are not performed as an employee, but in fulfillment of these academic requirements and are performed under supervision. At no time shall students replace or substitute for any employee of the Facility. This provision shall not be deemed to prohibit the employment of any such student by the Facility under a separate employment agreement. The University shall notify each student of the contents of this paragraph.

**E. There shall be no monetary consideration paid by either party to the other, it being acknowledged that the program provided hereunder is mutually beneficial. The parties shall cooperate in administering this program in a manner which will tend to maximize the mutual benefits provided to the University and Facility.**

F. This Agreement is intended solely for the mutual benefit of the parties hereto, and there is no intention, express or otherwise, to create any rights or interests for any party or person other than the Facility and the University; without limiting the generality of the foregoing, no rights are intended to be created for any patient, student, parent or guardian of any student, employer or prospective employer of any student.

G. In the performance of their respective duties and obligations under this Agreement, each party is an independent contractor, and neither is the agent, employee or servant of the other, and each is responsible only for its own conduct.

H. This Agreement constitutes the entire agreement between the parties, and all prior discussions, agreements and understandings, whether verbal or in writing, are hereby merged into this Agreement.

I. No amendment or modification to this Agreement, including any amendment or modification of this paragraph, shall be effective unless the same is in writing and signed by the party to be charged.

4. **Term of Agreement.** This Agreement is effective as of the date set forth above and shall continue for a term of three (3) years. Either party may terminate this Agreement by providing the other party with a written notice of the termination of this Agreement, and such termination shall be effective forty-five (45) days from the date of the written notice. However, students participating in clinical instruction with the Facility shall be permitted to complete their clinical program with the Facility.

5. **Notice.** Any notice under this Agreement shall be directed to:

For the Facility: \_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

For the University: Associate Dean/Department Head, Pharmacy Practice  
Ferris State University College of Pharmacy  
G500 – MERC  
1000 Monroe NW  
Grand Rapids, MI 49503

7. **Governing Law and Forum.** This Agreement shall be governed by, and construed under, the laws of the State of Michigan, which shall be the forum for any lawsuits arising from or incident to this Agreement.

IN WITNESS WHEREOF, the parties hereto have executed this Agreement as of the day and year first above written.

For the Facility

For the University

By: \_\_\_\_\_ By: \_\_\_\_\_

Its: \_\_\_\_\_ Its: \_\_\_\_\_

By: \_\_\_\_\_ By: \_\_\_\_\_

Its: \_\_\_\_\_ Its: \_\_\_\_\_

## APPENDIX 28.3

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### FERRIS STATE UNIVERSITY - COLLEGE OF PHARMACY CLINICAL PASSPORT CHECKLIST INSERT STUDENT NAME HERE

*The Clinical Passport is a collection of the most common requirements necessary for experiential placement during the Doctor of Pharmacy program. This checklist serves as a summary of those requirements and provides the status of each for this student; however the student is responsible for maintaining original documentation for each component and may be required to provide copies at any time upon request of the College, a faculty member, preceptor, or experiential site. Additional requirements may be imposed at any time by the College and/or experiential sites.*

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- ❑ IMMUNIZATION RECORDS: *All immunization records are verified by Spectrum-Health Occupational Health Services, Grand Rapids, Michigan*
  - ◆ TB Skin Test: **Complete/Incomplete**  
Date for Test #1: **Month/Year**  
Date for Test #2: **Month/Year**
  - ◆ Measles, Mumps, Rubella/Rubeola: **Complete/Incomplete**
  - ◆ Varicella: **Complete/Incomplete**
  - ◆ Hepatitis B: **Complete/Incomplete**
  - ◆ Tetanus/Diphtheria/\*Pertussis: **Month/Year**

*\* See individual student records for Pertussis vaccine; may be unavailable due to CDC guidelines regarding the interval between administration of Td and Tdap*

SPECIAL NOTES REGARDING IMMUNIZATION RECORDS: **Example: next TB skin test due date**

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- ❑ CRIMINAL BACKGROUND CHECK: *The following background check laws serve as the standard by which the College measures student criminal background check results: Public Acts 27-29 of 2006 (MCL 330.1134a, MCL 333.20173a, and MCL 400.734b, respectively), and 42 USC 1320a-7 as it is incorporated by the state laws. Annual criminal background check components include:*
  - ◆ Michigan Statewide Criminal Records
  - ◆ Residency History (covering past 7 years, with additional counties within the U.S. searched)
  - ◆ Nationwide Sexual Offender Registry
  - ◆ Nationwide Healthcare Fraud and Abuse Scan:
    - Medicare & Medicaid Sanctioned Excluded Individuals
    - Office of Research Integrity (ORI)
    - Office of Regulatory Affairs (ORA)
    - State Exclusion List
    - FDA Debarment Check
    - Office of Inspector General (OIG) – List of Excluded Individuals/Entities
    - General Services Administration (GSA) – Excluded Parties List

COMPLETED ON: **Month/Day/Year**

RESULTS: **No convictions found in conflict with the abovementioned Public Acts** – or –  
**Convictions found in conflict with the abovementioned Public Acts – see student for full report**

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- MICHIGAN PHARMACIST (INTERN) EDUCATIONAL LIMITED LICENSE:
  - ◆ License Number: **0123456789** ◆ Valid until: **Month/Day/Year**
  
- AMERICAN HEART ASSOCIATION - BLS FOR HEALTHCARE PROVIDERS (CPR & AED) PROGRAM:
  - ◆ Valid until: **Month/Year**
  
- HIPAA SECURITY TRAINING COMPLETED ON: **Month/Day/Year**
- HIPAA PRIVACY TRAINING COMPLETED ON: **Month/Day/Year**
- BLOOD BORNE PATHOGENS/RISK MANAGEMENT TRAINING COMPLETED ON: **Month/Day/Year**



*Mandy R. Seiferlein*  
Mandy R. Seiferlein, M.P.A.  
Director of External Clinical Operations

9/22/2010  
Date of Verification

## Appendix 29.1

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List of search databases available to faculty and students

The library provides access to over 100 databases. Available databases that are considered to be most pertinent to the College of Pharmacy include:

Access Pharmacy	Lexi-Comp
Cochrane Library	Lexis-Nexis Academic Universe
Drug Facts & Comparisons	Medline
Health & Wellness Resource Center	Micromedex
Health Reference Center	Natural Medicines Comprehensive Database
Health Sciences (Sage Full Text)	PubMed
Iowa Drug Information Service (IDIS)	ScienceDirect
International Pharmaceutical Abstracts	Stat!Ref Electronic Medical Library



## Appendix 29.2

As previously stated, the library has access to over 50,000 journals, with the majority of them available online. Selected journals relevant to the pharmacy program are listed below that are available online.

\*asterisk denotes journal specified in the *AACP Core List of Journals for Libraries that Serve Schools and Colleges of Pharmacy* (3<sup>rd</sup> edition, 2009)

*American Journal of Health-System Pharmacy	* Journal of Cardiovascular Pharmacology
*American Journal of Pharmaceutical Education	* Journal of Clinical Pharmacology
*Annals of Pharmacotherapy	Journal of Controlled Release
Archives of Toxicology	* Journal of Clinical Pharmacy and Therapeutics
*B M C Clinical Pharmacology	* Journal of Managed Care Pharmacy
* B M C Pharmacology	* Journal of Medicinal Chemistry
BMJ	* Journal of Natural Products
* Basic & Clinical Pharmacology & Toxicology	Journal of Neuroimmune Pharmacology
* Biochemical Pharmacology	Journal of Pharmaceutical and Biomedical Analysis
* Biopharmaceutics & Drug Disposition	* Journal of Pharmaceutical Marketing and Management
* British Journal of Clinical Pharmacology	* Journal of Pharmaceutical Sciences
* British Journal of Pharmacology	* Journal of Pharmacokinetics and Pharmacodynamics
* C N S Drugs	* Journal of Pharmacological and Toxicological Methods
Canadian Pharmacists Journal	* Journal of Pharmacology and Experimental Therapeutics
Cancer	* Journal of Pharmacy and Pharmaceutical Sciences
Cancer Treatment Reviews	* Journal of Pharmacy and Pharmacology
* Cardiovascular Drugs and Therapy	* Journal of the American Pharmacists Association
Chemical Biology and Drug Design	Journal of Psychopharmacology
Clinical Chemistry	Mayo Clinic Proceedings
Clinical Drug Investigation	Medical Care Research and Review
* Clinical Pharmacokinetics	* Medical Letter on Drugs and Therapeutics
* Clinical Pharmacology and Therapeutics	Medicinal Chemistry Research
Clinical Therapeutics	*Medicinal Research Reviews
* Clinical Toxicology	*Molecular Pharmacology
Current Opinion in Pharmacology	NEJM
Current Therapeutic Research	Neurology
* Drug Development and Industrial Pharmacy	*Neuropharmacology
* Drug Development Research	*P & T
* Drug Information Journal	Pain
* Drug Metabolism and Disposition	*Pharmaceutical Research
* Drug Safety	*PharmacoEconomics
* Drugs	*Pharmacological Research
* Drugs & Aging	*Pharmacological Reviews
* Food and Drug Law Journal	*Pharmacology & Therapeutics
* Formulary	*Pharmacotherapy

* Fundamental and Clinical Pharmacology	Phytomedicine
* International Journal of Pharmaceutical Compounding	Psychopharmacology
International Journal of Pharmaceutical Medicine	Regulatory Toxicology and Pharmacology
International Journal of Pharmaceutics	*Therapeutic Drug Monitoring
* Investigational New Drugs	*Toxicology and Applied Pharmacology
JAMA	Transfusion Medicine
Joint Commission Journal on Quality and Patient safety	
Joint Commission Perspectives	*Trends in Pharmacological Sciences
Journal of Biopharmaceutical Statistics	*U S Pharmacist

## Appendix 30.1

### Pharmacy Expenditures by Funding Source

	Actual 05-06	Actual 06-07	Actual 07-08	Actual 08-09	Actual 09-10
General Fund					
Salaries	\$4,015,606	\$4,210,442	\$4,309,905	\$4,523,777	\$4,943,054
Fringe Benefits	\$1,561,580	\$1,692,608	\$1,789,757	\$1,843,823	\$2,135,995
Student Help	\$13,783	\$11,118	\$18,423	\$20,738	\$18,686
CSSM	\$641,706	\$597,189	\$832,648	\$1,073,268	\$1,066,831
Equipment	\$122,664	\$181,974	\$64,032	\$93,516	0
Scholarships	0	0	0	0	0
<b>Total</b>	<b>\$6,355,339</b>	<b>\$6,693,331</b>	<b>\$7,014,765</b>	<b>\$7,555,122</b>	<b>\$8,164,566</b>
Development Funds	\$170,962	\$108,668	\$204,102	\$95,055	\$68,545
Continuing Ed. Funds	\$36,648	\$34,852	\$36,748	\$34,113	\$37,954
Research Funds	\$13,173	\$34,131	\$23,389	\$31,886	\$33,192
Scholarship Funds	\$81,838	\$71,605	\$67,196	\$125,550	\$138,059
<b>TOTAL</b>	<b>\$6,657,960</b>	<b>\$6,942,587</b>	<b>\$7,346,200</b>	<b>\$7,841,726</b>	<b>\$8,442,316</b>
Total Funding					
Salaries	\$4,018,906	\$4,211,442	\$4,311,905	\$4,525,827	\$4,944,054
Fringe Benefits	\$1,562,339	\$1,693,154	\$1,789,949	\$1,844,315	\$2,136,250
Student Help	\$13,841	\$13,493	\$18,794	\$20,738	\$18,686
CSSM	\$788,270	\$741,519	\$1,004,360	\$1,190,580	\$1,190,926
Equipment	\$164,154	\$181,974	\$106,932	\$123,616	0
Scholarships	\$110,450	\$101,005	\$114,260	\$136,650	\$152,400
<b>TOTAL</b>	<b>\$6,657,960</b>	<b>\$6,942,587</b>	<b>\$7,346,200</b>	<b>\$7,841,726</b>	<b>\$8,442,316</b>

## Appendix 30.2

### Pharmacy Revenue by Funding Source

	Actual 05-06	Actual 06-07	Actual 07-08	Actual 08-09	Actual 09-10
<b>General Fund</b>					
Budget Allocation	\$474,409	\$520,409	\$532,409	\$532,409	\$596,762
Equipment Allocation	\$80,250	\$63,374	0	0	0
Wage/Benefit Allocation	\$6,738,269	\$5,914,168	\$6,118,085	\$4,888,338	\$7,097,734
Base Increase	\$10,000	0	0	\$64,353	0
Budget trf in and out	\$52,096	(\$34,089)	(\$539,500)	(\$39,834)	\$504,859
Carryforward	\$753,796	\$1,126,604	\$819,679	\$1,235,231	\$640,205
Sales	\$33,621	\$36,800	\$45,234	\$41,895	\$61,633
One-time funds	\$7,373	\$2,516	\$5,515	\$7,011	\$284,841
<b>TOTAL</b>	<b>\$8,149,814</b>	<b>\$7,629,782</b>	<b>\$6,981,422</b>	<b>\$6,729,403</b>	<b>\$9,186,034</b>
<b>Non-General Fund</b>					
Development Funds	\$280,221	\$360,192	\$286,263	\$142,496	\$118,746
Continuing Ed. Funds	\$36,956	\$41,917	\$40,570	\$35,383	\$31,263
Research Funds	\$6,192	\$9,099	\$10,615	\$10,330	\$45,425
Scholarship Funds	\$65,284	\$76,417	\$82,340	\$123,255	\$63,971
<b>TOTAL</b>	<b>\$388,653</b>	<b>\$487,625</b>	<b>\$419,788</b>	<b>\$311,464</b>	<b>\$259,405</b>
<b>Ttl Non-General Rev</b>					
Gifts-alumni	\$78,854	\$165,168	\$96,715	\$60,837	\$92,463
Gifts-corporate	\$136,047	\$70,382	\$81,629	\$42,060	\$13,000
Grants/Contracts	\$19,958	\$65,446	\$30,149	\$30,480	\$48,625
Sales/service	\$47,986	\$73,750	\$88,687	\$52,525	\$38,338
Investment Income	\$105,808	\$112,879	\$122,608	\$125,562	\$66,9790
<b>TOTAL</b>	<b>\$388,653</b>	<b>\$487,625</b>	<b>\$419,788</b>	<b>\$311,464</b>	<b>\$259,405</b>

**FERRIS STATE UNIVERSITY  
COLLEGE OF PHARMACY  
ACCREDITATION SELF-STUDY**

**AACP SURVEY RESULTS**

**FERRIS STATE UNIVERSITY  
COLLEGE OF PHARMACY  
ACCREDITATION SELF-STUDY**

**AACP GRADUATE SURVEY**

**GRADUATING PHARMACY STUDENT SURVEY  
SUMMARY REPORT FOR THE SELECTED 1 SCHOOL(s).  
(FERRIS STATE UNIVERSITY)**

**Total number of responses: 113**

2008

**Demographic Information**

<b>Gender</b>	<b>Response Percent</b>	<b>Response Total</b>
Male	38.9%	44
Female	61.1%	69
<b>Primary area of paid outside work experiences while in school</b>	<b>Response Percent</b>	<b>Response Total</b>
Community pharmacy	Multiple Answers Entered	86
Institutional pharmacy	Multiple Answers Entered	19
Other pharmacy related	Multiple Answers Entered	5
Non-Pharmacy related	Multiple Answers Entered	13
I did not work	Multiple Answers Entered	11
<b>Hours worked per week if paid for outside work during your final professional year</b>	<b>Response Percent</b>	<b>Response Total</b>
I did not work during my final professional year	33.6%	38
Less than 10 hours	39.8%	45
10 to less than 15 hours	20.4%	23
15 to less than 20 hours	4.4%	5
20 to less than 30 hours	0.9%	1
30 or more hours	0.0%	0
No Answer	0.9%	1
<b>Hours worked per week if paid for outside work during the academic year immediately prior to final professional year</b>	<b>Response Percent</b>	<b>Response Total</b>
I did not work during the academic year immediately prior to my final professional year	24.8%	28
Less than 10 hours	25.7%	29
10 to less than 15 hours	24.8%	28
15 to less than 20 hours	18.6%	21
20 to less than 30 hours	3.5%	4
30 or more hours	2.7%	3
No Answer	0.0%	0
<b>College degrees earned prior to entering Doctor of Pharmacy program</b>	<b>Response Percent</b>	<b>Response Total</b>
Did not have a degree prior to entering program	Multiple Answers Entered	62
Associate's	Multiple Answers Entered	32
BS, BA or Other Bachelor's	Multiple Answers Entered	19

MBA	Multiple Answers Entered	0
Master's (other than MBA)	Multiple Answers Entered	3
JD or Other Law	Multiple Answers Entered	0
PhD	Multiple Answers Entered	0
MD, DDS or other Professional Doctorate	Multiple Answers Entered	0
Other Doctorate	Multiple Answers Entered	0
<b>Dual degree program participated in while completing Doctor of Pharmacy program</b>	<b>Response Percent</b>	<b>Response Total</b>
Did not participate in a dual degree program	100.0%	113
PharmD/PhD	0.0%	0
PharmD/MBA	0.0%	0
PharmD/MS	0.0%	0
PharmD/JD	0.0%	0
PharmD/MPH	0.0%	0
Other	0.0%	0
<b>Learning environment/configuration of curriculum</b>	<b>Response Percent</b>	<b>Response Total</b>
Traditional program (4 professional years)	69.0%	78
Accelerated program (3 professional years; year-round classes)	31.0%	35
<b>Enrolled learning environment</b>	<b>Response Percent</b>	<b>Response Total</b>
Main campus	63.7%	72
Branch campus (enter city and state)	23.0%	26
Satellite campus (enter city and state)	13.3%	15
Web-based program	0.0%	0
<b>Employment plans upon graduation</b>	<b>Response Percent</b>	<b>Response Total</b>
Community Pharmacist – Chain	Multiple Answers Entered	67
Community Pharmacist – Independent	Multiple Answers Entered	20
Hospital Pharmacist	Multiple Answers Entered	46
Long-term Care Pharmacist	Multiple Answers Entered	7
Managed Care Pharmacist	Multiple Answers Entered	2
Pharmaceutical Industry	Multiple Answers Entered	3
Pharmacist - Armed services or Regulator Agency	Multiple Answers Entered	1
Pharmacist - Other Government	Multiple Answers Entered	0
Professional Association	Multiple Answers Entered	1
Other Pharmacy Related Field	Multiple	12



Non - Pharmacy Related Field	Answers Entered Multiple	0
No Plans for Employment in the coming year	Answers Entered Multiple	1
<b>Education upon graduation</b>	<b>Response Percent</b>	<b>Response Total</b>
Pharmacy Residency Program	Answers Entered Multiple	27
Dual Pharmacy Residency - Master's Program	Answers Entered Multiple	0
Pharmacy Master's Program	Answers Entered Multiple	1
Pharmacy PhD Program	Answers Entered Multiple	0
MBA Program	Answers Entered Multiple	1
JD or Other Law Program	Answers Entered Multiple	0
Other Health Professions (MD, DDS, DVM, etc.)	Answers Entered Multiple	2
Other Non-Pharmacy Master's Program	Answers Entered Multiple	1
Non-Pharmacy PhD Program	Answers Entered Multiple	0
Fellowship	Answers Entered Multiple	0
No Plans for Further Education in the coming year	Answers Entered Multiple	60
<b>Borrowed money to help pay for your college expenses</b>	<b>Response Percent</b>	<b>Response Total</b>
Yes	96.5%	109
No	3.5%	4

## **Section I: Professional Competencies/Outcomes**

<b>Indicate the degree to which you agree or disagree with these statements.</b>					
	<b>Strongly Agree</b>	<b>Agree</b>	<b>Disagree</b>	<b>Strongly Disagree</b>	<b>Unable to Comment</b>
<b>The PharmD Program prepared me to...</b>					
9. gather and use specific information (e.g., patient histories, medical records) to identify patient medication-related problems.	35.4% (40)	61.9% (70)	1.8% (2)	0.9% (1)	0.0% (0)
10. develop a patient care plan to manage each medication-related problem.	35.4% (40)	61.9% (70)	1.8% (2)	0.9% (1)	0.0% (0)
11. work with the health care team to implement the patient care plan.	23.9% (27)	64.6% (73)	9.7% (11)	1.8% (2)	0.0% (0)
12. document pharmaceutical care activities.	23.0% (26)	63.7% (72)	10.6% (12)	1.8% (2)	0.9% (1)
13. interpret epidemiologic data relevant to specific diseases and their management.	18.6% (21)	65.5% (74)	13.3% (15)	1.8% (2)	0.9% (1)
14. interpret economic data relevant to drug management and specific diseases.	15.9% (18)	61.9% (70)	15.9% (18)	3.5% (4)	2.7% (3)
15. manage the system of medication use to affect patients.	27.4% (31)	61.1% (69)	8.0% (9)	0.9% (1)	2.7% (3)
16. identify and use risk reduction strategies to minimize medication errors.	25.7% (29)	58.4% (66)	13.3% (15)	1.8% (2)	0.9% (1)
17. communicate with patients, patients' agents, and health care providers.	38.9% (44)	54.0% (61)	3.5% (4)	3.5% (4)	0.0% (0)
18. provide patient care in accordance with legal, ethical, social, economic, and professional guidelines.	25.7% (29)	64.6% (73)	7.1% (8)	1.8% (2)	0.9% (1)
19. work with other stakeholders (e.g., patients and other health professionals) to engender a team approach to assure appropriate use of health care resources in providing patient care.	21.2% (24)	60.2% (68)	13.3% (15)	1.8% (2)	3.5% (4)
20. assure that medication use systems minimize medication errors.	18.6% (21)	59.3% (67)	19.5% (22)	1.8% (2)	0.9% (1)
21. interpret and apply drug use policy and health policy.	12.4% (14)	66.4% (75)	18.6% (21)	1.8% (2)	0.9% (1)
22. work with other stakeholders (e.g., patients and other health professionals) to identify and resolve problems related to medication use.	22.1% (25)	70.8% (80)	5.3% (6)	1.8% (2)	0.0% (0)
23. promote wellness and disease prevention services.	30.1% (34)	65.5% (74)	1.8% (2)	1.8% (2)	0.9% (1)
24. practice pharmacy in interprofessional and collaborative practice settings.	30.1% (34)	62.8% (71)	4.4% (5)	2.7% (3)	0.0% (0)
25. retrieve and evaluate the health sciences literature.	44.2% (50)	53.1% (60)	0.9% (1)	1.8% (2)	0.0% (0)

26. reflect critically on personal skills and actions and make plans to improve when necessary.	31.9% (36)	62.8% (71)	4.4% (5)	0.9% (1)	0.0% (0)
27. accept and respond to constructive feedback.	31.9% (36)	61.9% (70)	5.3% (6)	0.9% (1)	0.0% (0)

## **SECTION II: Doctor of Pharmacy Curriculum**

<b>Indicate the degree to which you agree or disagree with these statements.</b>					
	<b>Strongly Agree</b>	<b>Agree</b>	<b>Disagree</b>	<b>Strongly Disagree</b>	<b>Unable to Comment</b>
28. The curriculum followed a logical progression (i.e. courses were properly sequenced and integrated).	11.5% (13)	57.5% (65)	24.8% (28)	6.2% (7)	0.0% (0)
29. I developed the skills needed to prepare me for continued learning after graduation.	18.6% (21)	69.9% (79)	8.8% (10)	1.8% (2)	0.9% (1)
30. I was provided opportunities to engage in active learning (e.g., laboratories, recitations, student portfolios, problem-based learning, in-class activities).	23.0% (26)	63.7% (72)	12.4% (14)	0.9% (1)	0.0% (0)
31. I was encouraged to ask questions in class.	16.8% (19)	61.1% (69)	18.6% (21)	1.8% (2)	1.8% (2)
32. Pharmacy-related elective courses met my needs as a Pharm.D. student.	15.9% (18)	39.8% (45)	31.0% (35)	13.3% (15)	0.0% (0)
33. Course loads were reasonable.	9.7% (11)	75.2% (85)	12.4% (14)	1.8% (2)	0.9% (1)
34. The program included opportunities to develop professional attitudes, ethics and behaviors.	23.0% (26)	60.2% (68)	13.3% (15)	3.5% (4)	0.0% (0)

### **SECTION III: Pharmacy Practice Experiences**

<b>Indicate the degree to which you agree or disagree with these statements.</b>					
	<b>Strongly Agree</b>	<b>Agree</b>	<b>Disagree</b>	<b>Strongly Disagree</b>	<b>Unable to Comment</b>
35. My introductory pharmacy practice experiences were valuable in helping me to prepare for my advanced pharmacy practice experiences.	11.5% (13)	51.3% (58)	27.4% (31)	9.7% (11)	0.0% (0)
36. My introductory pharmacy practice experiences permitted my involvement in direct patient care responsibilities in both community and institutional settings.	15.0% (17)	48.7% (55)	25.7% (29)	10.6% (12)	0.0% (0)
37. The sites available for introductory pharmacy practice experiences were of high quality.	14.2% (16)	44.2% (50)	32.7% (37)	7.1% (8)	1.8% (2)
38. The process by which I was assigned sites for introductory pharmacy practice experiences worked well.	11.5% (13)	51.3% (58)	23.9% (27)	11.5% (13)	1.8% (2)
39. During my advanced practice experiences in the <b>community pharmacy setting</b> , I was able to develop my patient care skills.	21.2% (24)	47.8% (54)	17.7% (20)	4.4% (5)	8.8% (10)
40. During my advanced practice experiences in the <b>ambulatory care setting</b> , I was able to develop my patient care skills.	47.8% (54)	39.8% (45)	1.8% (2)	1.8% (2)	8.8% (10)
41. During my advanced practice experiences in the <b>hospital or health-system pharmacy setting</b> , I was able to develop my patient care skills.	34.5% (39)	50.4% (57)	9.7% (11)	2.7% (3)	2.7% (3)
42. During my advanced practice experiences in the <b>inpatient/acute care setting</b> , I was able to develop my patient care skills.	28.3% (32)	54.0% (61)	8.0% (9)	1.8% (2)	8.0% (9)
43. The need for continuity of care throughout the health care system was emphasized in the advanced pharmacy practice experiences.	18.6% (21)	66.4% (75)	12.4% (14)	0.0% (0)	2.7% (3)
44. The variety of the available advanced pharmacy practice experience electives met my needs as a student.	18.6% (21)	54.9% (62)	18.6% (21)	7.1% (8)	0.9% (1)
45. I was academically prepared to enter my advanced pharmacy practice experiences.	16.8% (19)	61.1% (69)	17.7% (20)	3.5% (4)	0.9% (1)
46. The sites available for advanced pharmacy practice experiences were of high quality.	23.9% (27)	63.7% (72)	8.0% (9)	2.7% (3)	1.8% (2)
47. The process by which I was assigned sites for advanced pharmacy practice	14.2% (16)	43.4% (49)	23.0% (26)	15.9% (18)	3.5% (4)

experiences worked well.					
48. Overall, my advanced practice experiences were valuable in helping me to achieve the professional competencies.	29.2% (33)	64.6% (73)	5.3% (6)	0.0% (0)	0.9% (1)
49. My pharmacy practice experiences allowed me to have direct interaction with diverse patient populations (e.g., age, gender, ethnic and/or cultural background, disease states, etc.).	39.8% (45)	55.8% (63)	4.4% (5)	0.0% (0)	0.0% (0)
50. My pharmacy practice experiences allowed me to collaborate with other health care professionals.	38.9% (44)	54.9% (62)	6.2% (7)	0.0% (0)	0.0% (0)

## **SECTION IV: Student Services**

<b>Indicate the degree to which you agree or disagree with these statements.</b>			
	<b>Agree</b>	<b>Disagree</b>	<b>Did not Utilize</b>
51. The academic advising met my needs.	25.7% (29)	21.2% (24)	53.1% (60)
52. The career planning and guidance met my needs.	20.4% (23)	18.6% (21)	61.1% (69)
53. Tutoring services met my needs.	8.0% (9)	10.6% (12)	81.4% (92)
54. The financial aid advising met my needs.	55.8% (63)	12.4% (14)	31.9% (36)
55. The student health and wellness services (e.g. immunizations, counseling services, campus pharmacy, primary care clinics, etc.) met my needs.	61.9% (70)	13.3% (15)	24.8% (28)

## **SECTION V: The Student Experience**

<b>Indicate the degree to which you agree or disagree with these statements.</b>			
	<b>Agree</b>	<b>Disagree</b>	<b>Unable to Comment</b>
56. The college/school of pharmacy provided timely information about news, events and important matters within the college/school of pharmacy.	69.0% (78)	24.8% (28)	6.2% (7)
57. Information was made available to me regarding post-graduate education and training opportunities (e.g., residencies, fellowships, graduate school).	80.5% (91)	14.2% (16)	5.3% (6)
58. The college/school's administration responded to problems and issues of concern to the student body.	52.2% (59)	38.1% (43)	9.7% (11)
59. I was aware of the process for raising issues with the college/school administration.	51.3% (58)	37.2% (42)	11.5% (13)
60. I was aware that student representatives served on college/school committees with responsibility for curriculum and other matters.	86.7% (98)	9.7% (11)	3.5% (4)
61. The college/school of pharmacy is welcoming to students with diverse backgrounds.	78.8% (89)	7.1% (8)	14.2% (16)
62. The admissions process of the college/school of pharmacy was well organized.	74.3% (84)	16.8% (19)	8.8% (10)
63. The college/school of pharmacy had a student government that effectively communicated student opinions and perspectives to the faculty or administration.	68.1% (77)	17.7% (20)	14.2% (16)
64. The college/school of pharmacy made use of a variety of means (e.g., course evaluations, student surveys, focus groups, meetings with administrative leaders) to obtain student perspectives on curriculum, student services, faculty/student relationships and other aspects of the program.	79.6% (90)	15.0% (17)	5.3% (6)
65. Faculty, administrators and staff were committed to serving as positive role models for students.	81.4% (92)	15.0% (17)	3.5% (4)
66. Overall, preceptors modeled professional attributes and behaviors in the pharmacy practice experiences.	92.9% (105)	5.3% (6)	1.8% (2)
67. Overall, preceptors provided me with individualized instruction, guidance and	86.7% (98)	11.5% (13)	1.8% (2)



evaluation that met my needs as a Doctor of Pharmacy student.			
68. I was aware of expected behaviors with respect to professional and academic conduct.	94.7% (107)	3.5% (4)	1.8% (2)
69. The college/school of pharmacy effectively managed <b>academic</b> misconduct by students.	57.5% (65)	9.7% (11)	32.7% (37)
70. The college/school of pharmacy effectively managed <b>professional</b> misconduct by students.	51.3% (58)	15.9% (18)	32.7% (37)
71. The college/school's administration and faculty encouraged me to participate in regional, state or national pharmacy meetings	85.0% (96)	8.8% (10)	6.2% (7)
72. The college/school of pharmacy was supportive of student professional organizations.	88.5% (100)	6.2% (7)	5.3% (6)
73. I was aware of opportunities to participate in research activities with faculty.	40.7% (46)	46.9% (53)	12.4% (14)

## **SECTION VI: Facilities, Experiential Sites and Educational Resources**

<b>Indicate the degree to which you agree or disagree with these statements.</b>					
	<b>Strongly Agree</b>	<b>Agree</b>	<b>Disagree</b>	<b>Strongly Disagree</b>	<b>Unable to Comment</b>
74. The campus provided a safe and comfortable environment for teaching and learning.	35.4% (40)	57.5% (65)	3.5% (4)	2.7% (3)	0.9% (1)
75. The computer and other information technology resources provided by the college/school of pharmacy and/or elsewhere on campus met my needs.	30.1% (34)	60.2% (68)	6.2% (7)	2.7% (3)	0.9% (1)
76. The laboratories and other simulated environments (e.g., model pharmacy) of the college/school of pharmacy met my needs.	18.6% (21)	63.7% (72)	11.5% (13)	4.4% (5)	1.8% (2)
77. The classrooms in the college/school of pharmacy or elsewhere on campus met my needs.	15.0% (17)	68.1% (77)	11.5% (13)	4.4% (5)	0.9% (1)
78. The study areas in the college/school of pharmacy or elsewhere on campus met my needs.	21.2% (24)	59.3% (67)	10.6% (12)	3.5% (4)	5.3% (6)
79. The common spaces such as lounges, lobbies or other areas for relaxation and socialization available in the college/school of pharmacy or elsewhere on campus met my needs.	27.4% (31)	61.1% (69)	7.1% (8)	0.9% (1)	3.5% (4)
80. On-campus access to educational resources (e.g., library, electronic data bases, drug information center) met my needs.	43.4% (49)	52.2% (59)	3.5% (4)	0.0% (0)	0.9% (1)
81. During pharmacy practice experiences access to educational resources (e.g., library, electronic data bases, drug information center) met my needs.	36.3% (41)	58.4% (66)	4.4% (5)	0.0% (0)	0.9% (1)

## **SECTION VII: Overall Impressions**

<b>Indicate the degree to which you agree or disagree with these statements.</b>					
	<b>Strongly Agree</b>	<b>Agree</b>	<b>Disagree</b>	<b>Strongly Disagree</b>	<b>Unable to Comment</b>
82. I am prepared to enter pharmacy practice.	25.7% (29)	61.9% (70)	8.8% (10)	1.8% (2)	1.8% (2)
83. If I were starting my college career over again I would choose to study pharmacy.	31.9% (36)	46.9% (53)	11.5% (13)	3.5% (4)	6.2% (7)
84. If I were starting my pharmacy program over again I would choose the same college/school of pharmacy.	22.1% (25)	44.2% (50)	12.4% (14)	10.6% (12)	10.6% (12)
85. I would recommend a career in pharmacy to a friend or relative.	37.2% (42)	55.8% (63)	3.5% (4)	0.9% (1)	2.7% (3)

# GRADUATING PHARMACY STUDENT SURVEY SUMMARY REPORT FOR FERRIS STATE UNIVERSITY

Total number of responses: 58

2009

## Part A. Demographic Information

<b>1. Gender</b>	<b>Response Percent</b>	<b>Response Total</b>
Male	41.4%	24
Female	58.6%	34
<b>2. Age</b>	<b>Response Percent</b>	<b>Response Total</b>
25 or under	69.0%	40
26-30	24.1%	14
31-35	1.7%	1
36 or older	5.2%	3
<b>3. Primary area of paid outside work experiences while in school</b>	<b>Response Percent</b>	<b>Response Total</b>
Community pharmacy	Multiple Answers Entered	40
Institutional pharmacy	Multiple Answers Entered	8
Other pharmacy related	Multiple Answers Entered	1
Non-Pharmacy related	Multiple Answers Entered	7
I did not work	Multiple Answers Entered	7
<b>3a. Hours worked per week if paid for outside work during your final professional year</b>	<b>Response Percent</b>	<b>Response Total</b>
I did not work during my final professional year	34.5%	20
Less than 10 hours	41.4%	24
10 to less than 15 hours	15.5%	9
15 to less than 20 hours	0.0%	0
20 to less than 30 hours	3.4%	2
30 or more hours	0.0%	0
No Answer	5.2%	3
<b>3b. Hours worked per week if paid for outside work during the academic year immediately prior to final professional year</b>	<b>Response Percent</b>	<b>Response Total</b>
I did not work during the academic year immediately prior to my final professional year	13.8%	8
Less than 10 hours	41.4%	24
10 to less than 15 hours	17.2%	10
15 to less than 20 hours	12.1%	7
20 to less than 30 hours	0.0%	0
30 or more hours	8.6%	5
No Answer	6.9%	4
<b>4. College degrees earned prior to entering Doctor of Pharmacy program</b>	<b>Response Percent</b>	<b>Response Total</b>
Did not have a degree prior to entering program	Multiple Answers Entered	31
Associate's	Multiple Answers Entered	14
BS, BA or Other Bachelor's	Multiple Answers Entered	14
MBA	Multiple Answers Entered	0
Master's (other than MBA)	Multiple Answers Entered	0
JD or Other Law	Multiple Answers Entered	0
PhD	Multiple Answers Entered	0

MD, DDS or other Professional Doctorate	Entered Multiple Answers Entered	0
Other Doctorate	Multiple Answers Entered	0
<b>5. Dual degree program participated in while completing Doctor of Pharmacy program</b>	<b>Response Percent</b>	<b>Response Total</b>
Did not participate in a dual degree program	98.3%	57
PharmD/PhD	0.0%	0
PharmD/MBA	1.7%	1
PharmD/MS	0.0%	0
PharmD/JD	0.0%	0
PharmD/MPH	0.0%	0
Other	0.0%	0
<b>6. Learning environment/configuration of curriculum</b>	<b>Response Percent</b>	<b>Response Total</b>
Traditional program (4 professional years)	79.3%	46
Accelerated program (3 professional years; year-round classes)	20.7%	12
<b>7. Enrolled learning environment</b>	<b>Response Percent</b>	<b>Response Total</b>
Main campus	75.9%	44
Branch campus (enter city and state)	15.5%	9
Satellite campus (enter city and state)	8.6%	5
Web-based program	0.0%	0
<b>8. Current plans upon your graduation from the college/school of pharmacy</b>	<b>Response Percent</b>	<b>Response Total</b>
<b>Employment</b>		
Community Pharmacist -- Chain	Multiple Answers Entered	28
Community Pharmacist -- Independent	Multiple Answers Entered	8
Hospital Pharmacist	Multiple Answers Entered	22
Long-term Care Pharmacist	Multiple Answers Entered	6
Managed Care Pharmacist	Multiple Answers Entered	3
Pharmaceutical Industry	Multiple Answers Entered	1
Pharmacist - Armed services or Regulator Agency	Multiple Answers Entered	0
Pharmacist - Other Government	Multiple Answers Entered	3
Professional Association	Multiple Answers Entered	1
Other Pharmacy Related Field	Multiple Answers Entered	5
Non - Pharmacy Related Field	Multiple Answers Entered	0
No Plans for Employment in the coming year	Multiple Answers Entered	0
<b>Further Education</b>	<b>Response Percent</b>	<b>Response Total</b>
Pharmacy Residency Program	Multiple Answers Entered	16
Dual Pharmacy Residency - Master's Program	Multiple Answers Entered	1
Pharmacy Master's Program	Multiple Answers Entered	1
Pharmacy PhD Program	Multiple Answers Entered	1
MBA Program	Multiple Answers Entered	3
JD or Other Law Program	Multiple Answers Entered	0

Other Health Professions (MD, DDS, DVM, etc.)	Multiple Answers Entered	0
Other Non-Pharmacy Master's Program	Multiple Answers Entered	1
Non-Pharmacy PhD Program	Multiple Answers Entered	0
Fellowship	Multiple Answers Entered	0
No Plans for Further Education in the coming year	Multiple Answers Entered	25
<b>9. Borrowed money to help pay for your college expenses</b>	<b>Response Percent</b>	<b>Response Total</b>
Yes	86.2%	50
No	13.8%	8

**Section I: Professional Competencies/Outcomes**

Indicate the degree to which you agree or disagree with these statements.					
	Strongly Agree	Agree	Disagree	Strongly Disagree	Unable to Comment
<b>The PharmD Program prepared me to...</b>					
10. communicate with health care providers.	27.6% (16)	62.1% (36)	5.2% (3)	3.4% (2)	1.7% (1)
11. communicate with patients and caregivers.	31.0% (18)	62.1% (36)	3.4% (2)	1.7% (1)	1.7% (1)
12. gather and use specific information (e.g., patient histories, medical records) to identify patient medication-related problems.	36.2% (21)	56.9% (33)	3.4% (2)	1.7% (1)	1.7% (1)
13. develop a patient care plan to manage each medication-related problem.	32.8% (19)	65.5% (38)	0.0% (0)	0.0% (0)	1.7% (1)
14. work with the health care team to implement the patient care plan.	29.3% (17)	55.2% (32)	8.6% (5)	3.4% (2)	3.4% (2)
15. document pharmaceutical care activities.	17.2% (10)	56.9% (33)	19.0% (11)	5.2% (3)	1.7% (1)
16. interpret epidemiologic data relevant to specific diseases and their management.	15.5% (9)	58.6% (34)	22.4% (13)	1.7% (1)	1.7% (1)
17. interpret economic data relevant to treatment of disease.	10.3% (6)	63.8% (37)	22.4% (13)	1.7% (1)	1.7% (1)
18. manage the system of medication use to affect patients.	22.4% (13)	69.0% (40)	6.9% (4)	0.0% (0)	1.7% (1)
19. identify and use risk reduction strategies to minimize medication errors.	24.1% (14)	63.8% (37)	8.6% (5)	0.0% (0)	3.4% (2)
20. provide patient care in accordance with legal, ethical, social, economic, and professional guidelines.	24.1% (14)	63.8% (37)	10.3% (6)	0.0% (0)	1.7% (1)
21. work with other stakeholders (e.g., patients and other health professionals) to engender a team approach to assure appropriate use of health care resources in providing patient care.	24.1% (14)	62.1% (36)	6.9% (4)	3.4% (2)	3.4% (2)
22. interpret and apply drug use policy and health policy.	15.5% (9)	74.1% (43)	5.2% (3)	3.4% (2)	1.7% (1)
23. work with other stakeholders (e.g., patients and other health professionals) to identify and resolve problems related to medication use.	20.7% (12)	72.4% (42)	3.4% (2)	1.7% (1)	1.7% (1)
24. promote wellness and disease prevention services.	24.1% (14)	62.1% (36)	8.6% (5)	3.4% (2)	1.7% (1)
25. practice pharmacy in interprofessional and collaborative practice settings.	25.9% (15)	69.0% (40)	3.4% (2)	0.0% (0)	1.7% (1)
26. search the health sciences literature.	48.3% (28)	48.3% (28)	1.7% (1)	0.0% (0)	1.7% (1)
27. evaluate the health sciences literature.	37.9% (22)	55.2% (32)	5.2% (3)	0.0% (0)	1.7% (1)
28. reflect critically on personal skills and actions and make plans to improve when necessary.	24.1% (14)	67.2% (39)	5.2% (3)	1.7% (1)	1.7% (1)
29. accept and respond to constructive feedback.	24.1% (14)	67.2% (39)	5.2% (3)	1.7% (1)	1.7% (1)

**SECTION II: Doctor of Pharmacy Curriculum**

Indicate the degree to which you agree or disagree with these statements.					
	Strongly Agree	Agree	Disagree	Strongly Disagree	Unable to Comment
30. The sequence of courses was appropriate to build my knowledge and skills.	19.0% (11)	53.4% (31)	20.7% (12)	5.2% (3)	1.7% (1)
31. I developed the skills needed to prepare me for continued learning after graduation.	25.9% (15)	56.9% (33)	13.8% (8)	1.7% (1)	1.7% (1)
32. I was provided opportunities to engage in active learning (e.g., laboratories, recitations, student portfolios, problem-based learning, in-class activities).	24.1% (14)	65.5% (38)	5.2% (3)	3.4% (2)	1.7% (1)
33. I was encouraged to ask questions in class.	17.2% (10)	63.8% (37)	13.8% (8)	3.4% (2)	1.7% (1)
34. Pharmacy-related elective courses met my needs as a Pharm.D. student.	13.8% (8)	60.3% (35)	20.7% (12)	3.4% (2)	1.7% (1)
35. Course loads were reasonable.	10.3% (6)	67.2% (39)	12.1% (7)	8.6% (5)	1.7% (1)
36. The program included opportunities to develop professional attitudes, ethics and behaviors.	25.9% (15)	56.9% (33)	12.1% (7)	3.4% (2)	1.7% (1)



### **SECTION III: Pharmacy Practice Experiences**

<b>Indicate the degree to which you agree or disagree with these statements.</b>					
	<b>Strongly Agree</b>	<b>Agree</b>	<b>Disagree</b>	<b>Strongly Disagree</b>	<b>Unable to Comment</b>
37. My introductory pharmacy practice experiences were valuable in helping me to prepare for my advanced pharmacy practice experiences.	15.5% (9)	51.7% (30)	25.9% (15)	5.2% (3)	1.7% (1)
38. My introductory pharmacy practice experiences permitted my involvement in direct patient care responsibilities in both community and institutional settings.	15.5% (9)	56.9% (33)	24.1% (14)	1.7% (1)	1.7% (1)
39. The sites available for introductory pharmacy practice experiences were of high quality.	24.1% (14)	46.6% (27)	20.7% (12)	1.7% (1)	6.9% (4)
40. The process by which I was assigned sites for introductory pharmacy practice experiences was fair.	12.1% (7)	65.5% (38)	10.3% (6)	8.6% (5)	3.4% (2)
41. In the community pharmacy setting, I was able to apply my patient care skills.	24.1% (14)	51.7% (30)	15.5% (9)	1.7% (1)	6.9% (4)
42. In the ambulatory care setting, I was able to apply my patient care skills.	46.6% (27)	39.7% (23)	5.2% (3)	0.0% (0)	8.6% (5)
43. In the hospital or health-system pharmacy setting, I was able to apply my patient care skills.	44.8% (26)	43.1% (25)	5.2% (3)	1.7% (1)	5.2% (3)
44. In the inpatient/acute care setting, I was able to apply my patient care skills.	39.7% (23)	50.0% (29)	5.2% (3)	0.0% (0)	5.2% (3)
45. The need for continuity of care throughout the health care system was emphasized in the advanced pharmacy practice experiences.	29.3% (17)	53.4% (31)	10.3% (6)	1.7% (1)	5.2% (3)
46. The variety of the available advanced pharmacy practice experience electives met my needs as a student.	22.4% (13)	58.6% (34)	12.1% (7)	3.4% (2)	3.4% (2)
47. I was academically prepared to enter my advanced pharmacy practice experiences.	24.1% (14)	50.0% (29)	17.2% (10)	5.2% (3)	3.4% (2)
48. The sites available for advanced pharmacy practice experiences were of high quality.	27.6% (16)	53.4% (31)	6.9% (4)	1.7% (1)	10.3% (6)
49. The process by which I was assigned sites for advanced pharmacy practice experiences was fair.	15.5% (9)	56.9% (33)	13.8% (8)	10.3% (6)	3.4% (2)
50. Overall, my advanced practice experiences were valuable in helping me to achieve the professional competencies.	32.8% (19)	56.9% (33)	3.4% (2)	1.7% (1)	5.2% (3)
51. My pharmacy practice experiences allowed me to have direct interaction with diverse patient populations (e.g., age, gender, ethnic and/or cultural background, disease states, etc.).	36.2% (21)	55.2% (32)	6.9% (4)	0.0% (0)	1.7% (1)
52. My pharmacy practice experiences allowed me to collaborate with other health care professionals.	43.1% (25)	51.7% (30)	1.7% (1)	0.0% (0)	3.4% (2)

**SECTION IV: Student Services**

Indicate the degree to which you agree or disagree with these statements.					
	Strongly Agree	Agree	Disagree	Strongly Disagree	Did not Utilize
53. Academic advising met my needs.	8.6% (5)	31.0% (18)	8.6% (5)	15.5% (9)	36.2% (21)
54. Career planning and guidance met my needs.	3.4% (2)	20.7% (12)	15.5% (9)	15.5% (9)	44.8% (26)
55. Tutoring services met my needs.	3.4% (2)	17.2% (10)	12.1% (7)	6.9% (4)	60.3% (35)
56. Financial aid advising met my needs.	6.9% (4)	46.6% (27)	5.2% (3)	10.3% (6)	31.0% (18)
57. Student health and wellness services (e.g. immunizations, counseling services, campus pharmacy, primary care clinics, etc.) met my needs.	12.1% (7)	48.3% (28)	12.1% (7)	6.9% (4)	20.7% (12)

## SECTION V: The Student Experience

Indicate the degree to which you agree or disagree with these statements.					
	Strongly Agree	Agree	Disagree	Strongly Disagree	Unable to Comment
58. The college/school of pharmacy provided timely information about news, events and important matters within the college/school of pharmacy.	10.3% (6)	56.9% (33)	22.4% (13)	8.6% (5)	1.7% (1)
59. Information was made available to me about additional educational opportunities (e.g., residencies, fellowships, graduate school).	22.4% (13)	62.1% (36)	12.1% (7)	1.7% (1)	1.7% (1)
60. The college/school's administration responded to problems and issues of concern to the student body.	10.3% (6)	50.0% (29)	22.4% (13)	12.1% (7)	5.2% (3)
61. I was aware of the process for raising issues with the college/school administration.	6.9% (4)	51.7% (30)	29.3% (17)	5.2% (3)	6.9% (4)
62. I was aware that student representatives served on college/school committees with responsibility for curriculum and other matters.	19.0% (11)	63.8% (37)	13.8% (8)	0.0% (0)	3.4% (2)
63. The college/school of pharmacy is welcoming to students with diverse backgrounds.	32.8% (19)	58.6% (34)	3.4% (2)	3.4% (2)	1.7% (1)
64. The admissions process of the college/school of pharmacy was well organized.	15.5% (9)	65.5% (38)	8.6% (5)	5.2% (3)	5.2% (3)
65. The college/school of pharmacy had a student government that effectively communicated student opinions and perspectives to the faculty or administration.	8.6% (5)	44.8% (26)	15.5% (9)	15.5% (9)	15.5% (9)
66. The college/school of pharmacy made use of a variety of means (e.g., course evaluations, student surveys, focus groups, meetings with administrative leaders) to obtain student perspectives on curriculum, student services, faculty/student relationships and other aspects of the program.	15.5% (9)	60.3% (35)	12.1% (7)	6.9% (4)	5.2% (3)
67. Faculty, administrators and staff were committed to serving as positive role models for students.	8.6% (5)	67.2% (39)	8.6% (5)	12.1% (7)	3.4% (2)
68. Overall, preceptors modeled professional attributes and behaviors in the pharmacy practice experiences.	20.7% (12)	63.8% (37)	6.9% (4)	5.2% (3)	3.4% (2)
69. Overall, preceptors provided me with individualized instruction, guidance and evaluation that met my needs as a Doctor of Pharmacy student.	22.4% (13)	63.8% (37)	8.6% (5)	3.4% (2)	1.7% (1)
70. I was aware of expected behaviors with respect to professional and academic conduct.	32.8% (19)	63.8% (37)	0.0% (0)	1.7% (1)	1.7% (1)
71. The college/school of pharmacy effectively managed <b>academic</b> misconduct by students.	10.3% (6)	46.6% (27)	8.6% (5)	8.6% (5)	25.9% (15)
72. The college/school of pharmacy effectively managed <b>professional</b> misconduct by students.	10.3% (6)	44.8% (26)	10.3% (6)	10.3% (6)	24.1% (14)
73. The college/school's administration and faculty encouraged me to participate in regional, state or national pharmacy meetings	22.4% (13)	56.9% (33)	10.3% (6)	5.2% (3)	5.2% (3)
74. The college/school of pharmacy was supportive of student professional organizations.	22.4% (13)	65.5% (38)	3.4% (2)	5.2% (3)	3.4% (2)
75. I was aware of opportunities to participate in research activities with faculty.	8.6% (5)	22.4% (13)	44.8% (26)	13.8% (8)	10.3% (6)

**SECTION VI: Facilities, Experiential Sites and Educational Resources**

Indicate the degree to which you agree or disagree with these statements.					
	Strongly Agree	Agree	Disagree	Strongly Disagree	Unable to Comment
76. My campus learning environment was safe.	34.5% (20)	62.1% (36)	0.0% (0)	1.7% (1)	1.7% (1)
77. The computer and other information technology resources provided by the college/school of pharmacy and/or elsewhere on campus were conducive to learning.	22.4% (13)	69.0% (40)	3.4% (2)	3.4% (2)	1.7% (1)
78. The classrooms in the college/school of pharmacy or elsewhere on campus were conducive to learning.	20.7% (12)	58.6% (34)	15.5% (9)	3.4% (2)	1.7% (1)
79. The laboratories and other non-classroom environments were conducive to learning.	20.7% (12)	69.0% (40)	6.9% (4)	1.7% (1)	1.7% (1)
80. The study areas in the college/school of pharmacy or elsewhere on campus were conducive to learning.	22.4% (13)	65.5% (38)	8.6% (5)	0.0% (0)	3.4% (2)
81. The common spaces such as lounges, lobbies or other areas for relaxation and socialization available in the college/school of pharmacy or elsewhere on campus met my needs.	27.6% (16)	62.1% (36)	6.9% (4)	1.7% (1)	1.7% (1)
82. On-campus access to educational resources (e.g., library, electronic data bases, drug information center) was conducive to learning.	37.9% (22)	58.6% (34)	1.7% (1)	0.0% (0)	1.7% (1)
83. During pharmacy practice experiences access to educational resources (e.g. library, electronic data bases, drug information center) was conducive to learning.	36.2% (21)	56.9% (33)	3.4% (2)	1.7% (1)	1.7% (1)

**SECTION VII: Overall Impressions**

Indicate the degree to which you agree or disagree with these statements.					
	Strongly Agree	Agree	Disagree	Strongly Disagree	Unable to Comment
84. I am prepared to enter pharmacy practice.	24.1% (14)	60.3% (35)	6.9% (4)	5.2% (3)	3.4% (2)
85. If I were starting my college career over again I would choose to study pharmacy.	27.6% (16)	55.2% (32)	8.6% (5)	5.2% (3)	3.4% (2)
86. If I were starting my pharmacy program over again I would choose the same college/school of pharmacy.	27.6% (16)	37.9% (22)	13.8% (8)	12.1% (7)	8.6% (5)
87. I would recommend a career in pharmacy to a friend or relative.	25.9% (15)	63.8% (37)	6.9% (4)	3.4% (2)	0.0% (0)

**FERRIS STATE UNIVERSITY  
COLLEGE OF PHARMACY  
ACCREDITATION SELF-STUDY**

**AACP ALUMNI SURVEY**

# PHARMACY ALUMNI SURVEY SUMMARY REPORT FOR FERRIS STATE UNIVERSITY

Total number of responses: 112

2008

## SECTION I: Demographic Information

### 1. Gender

	Response Percent	Response Total
Male	30.4%	34
Female	69.6%	78

### 2. Year of Graduation

	Response Percent	Response Total
2007	30.4%	34
2006	31.2%	35
2005	17.9%	20
2004	13.4%	15
2003	7.1%	8

### 3. Option that best describes the learning environment/configuration of the curriculum in the Pharm.D. program

	Response Percent	Response Total
Traditional program (4 professional years)	63.4%	71
Accelerated program (3 professional years; year-round classes)	36.6%	41

### 4. Option that best describes the learning environment in which you were enrolled.

	Response Percent	Response Total
Main campus	75.9%	85
Branch campus (enter city and state)	15.2%	17
Satellite campus (enter city and state)	8.9%	10
Web-based program	0.0%	0

### 5. Postgraduate education/training in addition to Pharm.D. degree.

	Response Percent	Response Total
No postgraduate education/training	Multiple Answers Entered	74
MBA	Multiple Answers Entered	2
Master's (other than MBA)	Multiple Answers Entered	2
Other Professional Doctorate (JD, MD, DDS)	Multiple Answers Entered	1
PhD	Multiple Answers Entered	1
Residency in Pharmacy Practice (any type)	Multiple Answers Entered	28
Specialty Residency (e.g., Drug Information, Pediatric, Primary care)	Multiple Answers Entered	6
Fellowship	Multiple Answers Entered	0
Other	Multiple Answers Entered	6

### 6. Level of involvement with the Alumni Association

	Response Percent	Response Total
None	90.2%	101

Minimal (occasionally attend functions)	9.8%	11
Moderate (regularly attend functions)	0.0%	0
Heavy (past or present service as an officer or on the board of directors)	0.0%	0
<b>7. Extent of pharmacy employment</b>	<b>Response Percent</b>	<b>Response Total</b>
Part-time	Multiple Answers Entered	9
Full time (35 hrs & above)	Multiple Answers Entered	102
Not currently practicing	Multiple Answers Entered	1
No longer in pharmacy profession	Multiple Answers Entered	0
Student (post graduate education/training)	Multiple Answers Entered	0
<b>8. State of primary practice</b>	<b>Response Percent</b>	<b>Response Total</b>
N/A	4.5%	5
Alabama	0.0%	0
Alaska	0.0%	0
Amer. Samoa	0.0%	0
Arizona	0.9%	1
Arkansas	0.0%	0
California	1.8%	2
Canal Zone	0.0%	0
Colorado	1.8%	2
Connecticut	0.0%	0
Delaware	0.0%	0
Dis. of Columbia	0.0%	0
Florida	0.0%	0
Georgia	0.0%	0
Guam	0.0%	0
Hawaii	0.0%	0
Idaho	0.0%	0
Illinois	1.8%	2
Indiana	0.9%	1
Iowa	0.0%	0
Kansas	0.0%	0
Kentucky	0.0%	0
Louisiana	0.0%	0
Maine	0.0%	0
Maryland	0.9%	1
Massachusetts	0.0%	0
Michigan	74.1%	83
Midway Islands	0.0%	0
Minnesota	0.0%	0
Mississippi	0.0%	0
Missouri	0.9%	1
Montana	0.0%	0
Nebraska	0.0%	0



Nevada	0.0%	0
New Hampshire	0.0%	0
New Jersey	0.0%	0
New Mexico	0.0%	0
New York	0.9%	1
North Carolina	2.7%	3
North Dakota	0.0%	0
Ohio	0.9%	1
Oklahoma	0.0%	0
Oregon	0.0%	0
Pennsylvania	0.9%	1
Puerto Rico	0.0%	0
Rhode Island	0.0%	0
South Carolina	0.0%	0
South Dakota	0.0%	0
Tennessee	1.8%	2
Texas	0.9%	1
Utah	0.0%	0
Vermont	0.0%	0
Virgin Islands	0.0%	0
Virginia	0.9%	1
W. Virginia	0.9%	1
Wake Islands	0.0%	0
Washington	0.0%	0
Wisconsin	2.7%	3
Wyoming	0.0%	0

**9. Setting of primary practice**

	<b>Response Percent</b>	<b>Response Total</b>
Chain community pharmacy	34.8%	39
Independent community pharmacy	9.8%	11
Hospital	36.6%	41
Clinic-based pharmacy	3.6%	4
Consultant	0.0%	0
Home care	1.8%	2
Nursing home/Long-term care facility	1.8%	2
Academia	1.8%	2
Association management	0.0%	0
Pharmaceutical industry	1.8%	2
Managed care	0.9%	1
Government or regulatory agency	0.9%	1
Other	6.2%	7

**10. Pharmacy organization membership**

	<b>Response Percent</b>	<b>Response Total</b>
APhA	Multiple Answers Entered	36
ASHP	Multiple Answers Entered	35
AMCP	Multiple Answers Entered	1
AACP	Multiple Answers	2

ACCP	Entered Multiple Answers Entered	15
ASCP	Multiple Answers Entered	3
NACDS	Multiple Answers Entered	0
NCPA	Multiple Answers Entered	2
State Association	Multiple Answers Entered	51
None	Multiple Answers Entered	32
Other	Multiple Answers Entered	13
<b>11. Level of involvement in most active pharmacy organization</b>	<b>Response Percent</b>	<b>Response Total</b>
Minimal (occasionally attend meetings)	77.7%	87
Moderate (regularly attend meetings, occasionally serve on committees)	12.5%	14
Heavy (regularly serve on committees and/or serve as an officer)	9.8%	11
<b>12. Current or former preceptor</b>	<b>Response Percent</b>	<b>Response Total</b>
Yes	43.8%	49
No	56.2%	63
<b>13. Current or former pharmacy school adjunct faculty</b>	<b>Response Percent</b>	<b>Response Total</b>
Yes	24.1%	27
No	75.9%	85

## **SECTION II: Development/Communication**

<b>Indicate the degree to which you agree or disagree with these statements.</b>					
	<b>Strongly Agree</b>	<b>Agree</b>	<b>Disagree</b>	<b>Strongly Disagree</b>	<b>Unable to Comment</b>
14. The college/school communicates effectively with alumni about college/school activities.	6.2% (7)	62.5% (70)	16.1% (18)	4.5% (5)	10.7% (12)
15. The current Dean is providing leadership in pharmacy.	13.4% (15)	45.5% (51)	13.4% (15)	6.2% (7)	21.4% (24)
16. The current Dean encourages alumni to stay involved.	13.4% (15)	37.5% (42)	23.2% (26)	3.6% (4)	22.3% (25)
17. Since graduation, the college/school has solicited my input/feedback for programmatic improvement.	8.0% (9)	39.3% (44)	33.9% (38)	7.1% (8)	11.6% (13)
<b>When I was a student...</b>					
18. the college/school provided an environment and culture that promoted professional behavior and harmonious relationships among students, faculty, administrators, preceptors and staff.	28.6% (32)	58.0% (65)	8.9% (10)	3.6% (4)	0.9% (1)
19. the faculty, administrators, and staff were committed to developing professionalism, fostering leadership, and to serving as mentors and positive role models.	29.5% (33)	60.7% (68)	6.2% (7)	2.7% (3)	0.9% (1)
20. I knew what the program outcomes were.	21.4% (24)	73.2% (82)	5.4% (6)	0.0% (0)	0.0% (0)
21. the curriculum was properly sequenced.	15.2% (17)	70.5% (79)	14.3% (16)	0.0% (0)	0.0% (0)
22. the curriculum provided opportunities to engage in active learning (e.g., laboratories, recitations, student portfolios, problem-based learning).	22.3% (25)	70.5% (79)	6.2% (7)	0.9% (1)	0.0% (0)
23. I was encouraged to assume responsibility for my own learning.	31.2% (35)	64.3% (72)	4.5% (5)	0.0% (0)	0.0% (0)
24. my coursework prepared me to enter my practice experiences (rotations).	19.6% (22)	63.4% (71)	12.5% (14)	2.7% (3)	1.8% (2)
25. the courses I took prepared me to enter my first pharmacy job.	20.5% (23)	56.2% (63)	19.6% (22)	2.7% (3)	0.9% (1)
26. there was adequate communication about post graduate training opportunities (e.g., residencies, fellowships, graduate schools).	25.0% (28)	50.0% (56)	17.9% (20)	4.5% (5)	2.7% (3)

### **SECTION III: Curriculum**

<b>Indicate the degree to which you agree or disagree with these statements.</b>					
	<b>Strongly Agree</b>	<b>Agree</b>	<b>Disagree</b>	<b>Strongly Disagree</b>	<b>Unable to Comment</b>
<b>When I was a student...</b>					
27. pharmacy related elective courses met my needs as a Pharm.D. student	18.8% (21)	58.0% (65)	18.8% (21)	4.5% (5)	0.0% (0)
28. the college/school provided an adequate number and mix of practice facilities for experiential education (rotations).	23.2% (26)	61.6% (69)	10.7% (12)	4.5% (5)	0.0% (0)
29. the faculty were effective teachers.	25.0% (28)	58.9% (66)	13.4% (15)	0.9% (1)	1.8% (2)
30. the faculty displayed respect for their colleagues and students.	25.9% (29)	63.4% (71)	6.2% (7)	3.6% (4)	0.9% (1)
<b>The PharmD Program prepared me to...</b>					
31. develop and use patient-specific pharmacy care plans	25.0% (28)	69.6% (78)	3.6% (4)	0.0% (0)	1.8% (2)
32. effectively manage a patient-centered pharmacy practice	20.5% (23)	69.6% (78)	6.2% (7)	1.8% (2)	1.8% (2)
33. develop disease management programs	18.8% (21)	56.2% (63)	20.5% (23)	2.7% (3)	1.8% (2)
34. manage the system of medication use	19.6% (22)	64.3% (72)	11.6% (13)	0.9% (1)	3.6% (4)
35. promote the availability of health promotion and disease prevention initiatives	18.8% (21)	58.0% (65)	20.5% (23)	0.9% (1)	1.8% (2)
36. communicate with patients, caregivers, and other members of the interprofessional health care team	29.5% (33)	59.8% (67)	7.1% (8)	1.8% (2)	1.8% (2)
37. retrieve and evaluate the health sciences literature	38.4% (43)	57.1% (64)	2.7% (3)	0.9% (1)	0.9% (1)
38. demonstrate expertise in the area of informatics (resources, devices, and methods required to optimize the acquisition, storage, retrieval, and use of information in pharmacy and healthcare)	23.2% (26)	61.6% (69)	12.5% (14)	1.8% (2)	0.9% (1)
39. apply state and federal laws and regulations to the practice of pharmacy	17.0% (19)	55.4% (62)	20.5% (23)	5.4% (6)	1.8% (2)
40. maintain professional competence	24.1% (27)	68.8% (77)	4.5% (5)	0.9% (1)	1.8% (2)

#### **SECTION IV: General Impressions**

<b>Indicate the degree to which you agree or disagree with these statements.</b>					
	<b>Strongly Agree</b>	<b>Agree</b>	<b>Disagree</b>	<b>Strongly Disagree</b>	<b>Unable to Comment</b>
41. If I were starting my education over today, I would choose pharmacy as a career.	48.2% (54)	35.7% (40)	9.8% (11)	4.5% (5)	1.8% (2)
42. If I were starting my education over today, I would choose the same college/school of pharmacy.	38.4% (43)	37.5% (42)	14.3% (16)	4.5% (5)	5.4% (6)
43. As I reflect on my pharmacy education, I would rate the overall quality of my education experience as very good.	32.1% (36)	55.4% (62)	8.9% (10)	3.6% (4)	0.0% (0)

**FERRIS STATE UNIVERSITY  
COLLEGE OF PHARMACY  
ACCREDITATION SELF-STUDY**

**AACP PRECEPTOR SURVEY**

# PHARMACY PRECEPTOR SURVEY SUMMARY REPORT FOR FERRIS STATE UNIVERSITY

**Total number of responses: 148**

2008

## **SECTION I: Demographic Information**

<b>Gender</b>	<b>Response Percent</b>	<b>Response Total</b>
Male	56.1%	83
Female	43.9%	65
<b>Number of years as a licensed pharmacist</b>		
1-5	14.9%	22
6-10	20.9%	31
11-15	14.2%	21
more than 15	49.3%	73
Not a licensed Pharmacist	0.7%	1
<b>My practice setting is best described as</b>		
Acute care	35.1%	52
Ambulatory care	7.4%	11
Academia	0.7%	1
Community pharmacy	29.7%	44
Drug information	0.0%	0
General medicine	2.0%	3
Industry	2.0%	3
Management	7.4%	11
Other	15.5%	23
<b>I precept students in</b>		
Introductory pharmacy practice experiences (Introductory practice experiences occur prior to the final professional year of the curriculum and can include activities such as shadowing, interviewing patients, and service learning).	27.0%	40
Advanced pharmacy practices (Advanced practice experiences should involve direct patient care and most commonly form the core of the final professional year of the curriculum)	37.8%	56
Both introductory and advanced pharmacy practice experiences	35.1%	52
<b>Do you have certification or designation through your state board of pharmacy as preceptor</b>		
Yes	91.9%	136
No	8.1%	12
<b>Degree/Postgraduate Training</b>		
BS Pharm	Multiple Answers Entered	92
PharmD	Multiple Answers Entered	66
MBA	Multiple	7

	Answers Entered	
Master's (other than MBA)	Multiple Answers Entered	11
	Multiple Answers Entered	
Other professional Doctorate (JD, MD, DDS)	Multiple Answers Entered	3
	Multiple Answers Entered	
PhD	Multiple Answers Entered	2
	Multiple Answers Entered	
Residency	Multiple Answers Entered	32
	Multiple Answers Entered	
Fellowship	Multiple Answers Entered	2
	Multiple Answers Entered	
<b>Number of years serving as a preceptor for this college/school</b>	<b>Response Percent</b>	<b>Response Total</b>
less than 1	8.8%	13
1-3	33.8%	50
4-6	24.3%	36
7-10	10.1%	15
more than 10	23.0%	34
<b>Number of students directly precepted for this college/school over this past academic year</b>	<b>Response Percent</b>	<b>Response Total</b>
less than 3	38.5%	57
3-5	33.1%	49
6-10	18.9%	28
more than 10	9.5%	14
<b>I precept students from _____ college/school(s)</b>	<b>Response Percent</b>	<b>Response Total</b>
1	66.9%	99
2	21.6%	32
3	8.8%	13
more than 3	2.7%	4
<b>If you precept students from 2 or more college/schools, have you completed this survey for another college/school</b>	<b>Response Percent</b>	<b>Response Total</b>
Yes	0.7%	1
No	39.2%	58
Only precept students at one college/school	60.1%	89



## **SECTION II: Communication**

<b>Indicate the degree to which you agree or disagree with these statements.</b>					
	<b>Strongly Agree</b>	<b>Agree</b>	<b>Disagree</b>	<b>Strongly Disagree</b>	<b>Unable to Comment</b>
1. I know the process for documenting and addressing student performance from the college/school.	41.9% (62)	54.7% (81)	1.4% (2)	0.7% (1)	1.4% (2)
2. I receive student feedback regarding my students' practice experience.	18.9% (28)	41.9% (62)	25.7% (38)	6.1% (9)	7.4% (11)
3. I know how to utilize the process that exists within the college/school to effectively manage <b>academic</b> misconduct (e.g., plagiarism) by students.	14.9% (22)	56.8% (84)	21.6% (32)	2.0% (3)	4.7% (7)
4. I know how to utilize the process that exists within the college/school to effectively manage <b>professional</b> misconduct (e.g., repeated tardiness/absences, drug diversion) by students.	17.6% (26)	57.4% (85)	19.6% (29)	2.0% (3)	3.4% (5)
5. I know how to utilize policies of the college/school that deal with harassment and discrimination.	12.8% (19)	56.8% (84)	24.3% (36)	2.7% (4)	3.4% (5)
6. The criteria for my performance as a preceptor are commensurate with my responsibilities as defined by the college/school.	16.2% (24)	69.6% (103)	4.7% (7)	1.4% (2)	8.1% (12)
7. The criteria for evaluating my performance as a preceptor are clear.	10.8% (16)	49.3% (73)	28.4% (42)	2.0% (3)	9.5% (14)

### **SECTION III: Curriculum**

<b>Indicate the degree to which you agree or disagree with these statements.</b>					
	<b>Strongly Agree</b>	<b>Agree</b>	<b>Disagree</b>	<b>Strongly Disagree</b>	<b>Unable to Comment</b>
8. The responsibilities of the <b>student</b> have been defined at my site.	41.2% (61)	57.4% (85)	1.4% (2)	0.0% (0)	0.0% (0)
9. The responsibilities as a <b>preceptor</b> have been defined at my site.	30.4% (45)	62.8% (93)	6.1% (9)	0.0% (0)	0.7% (1)
10. The objectives for my pharmacy practice experience have been defined at my site.	33.8% (50)	62.2% (92)	3.4% (5)	0.0% (0)	0.7% (1)
11. I use feedback about my site to make improvements to my student practice experience.	31.1% (46)	49.3% (73)	9.5% (14)	1.4% (2)	8.8% (13)
12. I am given the opportunity to provide feedback on the curriculum.	15.5% (23)	43.9% (65)	29.1% (43)	2.7% (4)	8.8% (13)
13. Students at my site have the opportunity to interact with other healthcare professionals	62.8% (93)	35.1% (52)	2.0% (3)	0.0% (0)	0.0% (0)
14. Students are willing to assume responsibility for their own learning at my site.	35.1% (52)	58.1% (86)	4.7% (7)	0.7% (1)	1.4% (2)
15. The assessment tools provided to me for my site are suitable for measuring student performance.	24.3% (36)	63.5% (94)	10.1% (15)	1.4% (2)	0.7% (1)
<b>The PharmD program prepares students to...</b>					
16. Develop and use patient-specific pharmacy care plans.	22.3% (33)	66.2% (98)	5.4% (8)	0.0% (0)	6.1% (9)
17. Effectively manage a patient-centered pharmacy practice.	20.3% (30)	64.2% (95)	6.8% (10)	0.0% (0)	8.8% (13)
18. Develop disease management programs.	18.2% (27)	64.2% (95)	10.1% (15)	0.0% (0)	7.4% (11)
19. Manage the system of medication use.	20.3% (30)	67.6% (100)	6.8% (10)	0.0% (0)	5.4% (8)
20. Promote the availability of health promotion and disease prevention initiatives.	20.3% (30)	59.5% (88)	8.1% (12)	0.0% (0)	12.2% (18)
21. Communicate with patients, caregivers, and other members of the interprofessional health care team.	32.4% (48)	59.5% (88)	5.4% (8)	0.7% (1)	2.0% (3)
22. Retrieve and evaluate the health sciences literature.	33.8% (50)	58.1% (86)	7.4% (11)	0.0% (0)	0.7% (1)
23. Demonstrate expertise in the area of informatics (resources, devices, and methods required to optimize the acquisition, storage, retrieval, and use of information in pharmacy and healthcare).	27.0% (40)	64.2% (95)	5.4% (8)	0.0% (0)	3.4% (5)
24. Apply state and federal laws and regulations to the practice of pharmacy.	20.9% (31)	69.6% (103)	4.7% (7)	0.7% (1)	4.1% (6)
25. Maintain professional competence.	28.4% (42)	68.2% (101)	2.0% (3)	0.0% (0)	1.4% (2)

#### **SECTION IV: Resources/Support**

<b>Indicate the degree to which you agree or disagree with these statements.</b>					
	<b>Strongly Agree</b>	<b>Agree</b>	<b>Disagree</b>	<b>Strongly Disagree</b>	<b>Unable to Comment</b>
26. I have ongoing contact with the Office of Experiential Education.	12.2% (18)	60.1% (89)	20.3% (30)	1.4% (2)	6.1% (9)
27. I receive needed support from the Office of Experiential Education.	15.5% (23)	62.8% (93)	8.1% (12)	0.0% (0)	13.5% (20)
28. The student-to-preceptor ratios at my site are appropriate to maximize learning.	42.6% (63)	53.4% (79)	2.0% (3)	0.7% (1)	1.4% (2)
29. The college/school has an effective continuing professional development program for me that is consistent with my preceptor responsibilities.	22.3% (33)	66.9% (99)	6.1% (9)	0.0% (0)	4.7% (7)
30. There are adequate facilities and resources at the practice site to precept students.	35.1% (52)	62.2% (92)	2.7% (4)	0.0% (0)	0.0% (0)
31. The college/school provides access to library and educational resources.	20.3% (30)	49.3% (73)	14.9% (22)	9.5% (14)	6.1% (9)

**FERRIS STATE UNIVERSITY  
COLLEGE OF PHARMACY  
ACCREDITATION SELF-STUDY**

**AACP FACULTY SURVEY**

## PHARMACY FACULTY SURVEY SUMMARY REPORT FOR FERRIS STATE UNIVERSITY

2007

**Total number of responses: 30**

### **SECTION I: Administrative System**

Indicate the degree to which you agree or disagree with these statements.					
	Strongly Agree	Agree	Disagree	Strongly Disagree	Unable to Comment
1. Administrators (e.g., Dean, Associate/Assistant Dean, Department Chair) have clearly defined responsibilities.	0.0% (0)	60.0% (18)	20.0% (6)	16.7% (5)	3.3% (1)
2. The college/school's administrators (e.g., Dean, Associate/Assistant Dean, Department Chair) function as a unified team.	3.3% (1)	33.3% (10)	40.0% (12)	23.3% (7)	0.0% (0)
3. The Dean is an effective leader of the college/school.	0.0% (0)	10.0% (3)	43.3% (13)	46.7% (14)	0.0% (0)
4. The administration is <b>aware</b> of my needs/problems.	6.7% (2)	53.3% (16)	13.3% (4)	23.3% (7)	3.3% (1)
5. The administration is <b>responsive</b> to my needs/problems.	10.0% (3)	40.0% (12)	20.0% (6)	26.7% (8)	3.3% (1)
6. The college/school has clearly communicated policies for dealing with harassment and discrimination.	13.3% (4)	40.0% (12)	16.7% (5)	16.7% (5)	13.3% (4)
7. A college/school committee(s) exist(s) to manage curricular development, evaluation, and improvement.	43.3% (13)	40.0% (12)	6.7% (2)	6.7% (2)	3.3% (1)
8. Faculty meetings function effectively as part of the governance of the college/school.	10.0% (3)	50.0% (15)	20.0% (6)	16.7% (5)	3.3% (1)

### **SECTION II: Promotion and/or Tenure**

Indicate the degree to which you agree or disagree with these statements.					
	Strongly Agree	Agree	Disagree	Strongly Disagree	Unable to Comment
9. The college/school applies the policies and procedures for faculty <b>recruitment</b> in a consistent manner.	20.0% (6)	40.0% (12)	23.3% (7)	6.7% (2)	10.0% (3)
10. I have access to documents that detail policies related to my performance as a faculty member.	26.7% (8)	43.3% (13)	16.7% (5)	3.3% (1)	10.0% (3)
11. My performance assessment criteria are explicit and clear.	10.0% (3)	36.7% (11)	23.3% (7)	23.3% (7)	6.7% (2)
12. Criteria for my performance assessment are commensurate with my responsibilities.	6.7% (2)	43.3% (13)	26.7% (8)	13.3% (4)	10.0% (3)
13. I am encouraged to contribute to knowledge through scholarship/research.	26.7% (8)	46.7% (14)	13.3% (4)	10.0% (3)	3.3% (1)
14. My performance is evaluated at least on an annual basis.	20.0% (6)	36.7% (11)	26.7% (8)	13.3% (4)	3.3% (1)
15. The college/school applies the policies and procedures for faculty <b>promotion and/or tenure</b> in a consistent manner.	10.0% (3)	30.0% (9)	23.3% (7)	26.7% (8)	10.0% (3)

### **SECTION III: Infrastructure**

Indicate the degree to which you agree or disagree with these statements.					
	Strongly Agree	Agree	Disagree	Strongly Disagree	Unable to Comment
16. I receive adequate support staff resources.	23.3% (7)	50.0% (15)	23.3% (7)	3.3% (1)	0.0% (0)

17. I have adequate office space.	26.7% (8)	63.3% (19)	3.3% (1)	3.3% (1)	3.3% (1)
18. I have adequate laboratory and/or clinical <b>resources</b> for my research and/or scholarship needs.	13.3% (4)	40.0% (12)	16.7% (5)	16.7% (5)	13.3% (4)
19. I have adequate laboratory and/or clinical <b>space</b> for my research and/or scholarship needs.	16.7% (5)	53.3% (16)	3.3% (1)	10.0% (3)	16.7% (5)
20. Computer resources are adequate for my academic responsibilities.	26.7% (8)	70.0% (21)	3.3% (1)	0.0% (0)	0.0% (0)
21. I have access to a library and other educational resources that are sufficient to support my educational and research needs.	16.7% (5)	60.0% (18)	13.3% (4)	6.7% (2)	3.3% (1)
22. The college/school has appropriate physical facilities to allow me to fulfill my responsibilities.	16.7% (5)	60.0% (18)	13.3% (4)	3.3% (1)	6.7% (2)
23. The college/school has a sufficient number of qualified <b>full-time</b> faculty to effectively deliver the professional degree program.	3.3% (1)	23.3% (7)	46.7% (14)	23.3% (7)	3.3% (1)
24. The program's resources can accommodate present student enrollment.	0.0% (0)	20.0% (6)	50.0% (15)	26.7% (8)	3.3% (1)
25. The physical facilities enable out-of-class interaction among administration, faculty, and students.	6.7% (2)	36.7% (11)	23.3% (7)	20.0% (6)	13.3% (4)
26. My campus work environment is safe.	36.7% (11)	50.0% (15)	6.7% (2)	0.0% (0)	6.7% (2)

#### **SECTION IV: Role and Governance**

Indicate the degree to which you agree or disagree with these statements.					
	Strongly Agree	Agree	Disagree	Strongly Disagree	Unable to Comment
27. The college/school effectively employs strategic planning.	6.7% (2)	36.7% (11)	23.3% (7)	16.7% (5)	16.7% (5)
28. The college/school requested my input during the development of the current strategic plan.	6.7% (2)	36.7% (11)	30.0% (9)	16.7% (5)	10.0% (3)
29. At the college/school, my opinions seem to count.	6.7% (2)	56.7% (17)	16.7% (5)	16.7% (5)	3.3% (1)

#### **SECTION V: Colleagues**

Indicate the degree to which you agree or disagree with these statements.					
	Strongly Agree	Agree	Disagree	Strongly Disagree	Unable to Comment
<b>My colleagues possess...</b>					
30. appropriate <b>professional</b> expertise.	33.3% (10)	63.3% (19)	0.0% (0)	0.0% (0)	3.3% (1)
31. appropriate <b>academic</b> expertise.	30.0% (9)	63.3% (19)	0.0% (0)	3.3% (1)	3.3% (1)
32. contemporary knowledge and abilities in current educational philosophy and techniques.	23.3% (7)	66.7% (20)	6.7% (2)	0.0% (0)	3.3% (1)
33. commitment to the advancement of the profession.	30.0% (9)	60.0% (18)	6.7% (2)	0.0% (0)	3.3% (1)
34. commitment to the pursuit of research and other scholarly activities.	10.0% (3)	60.0% (18)	13.3% (4)	10.0% (3)	6.7% (2)

#### **SECTION VI: Faculty Development**

Indicate the degree to which you agree or disagree with these statements.					
	Strongly Agree	Agree	Disagree	Strongly Disagree	Unable to Comment
35. I receive adequate guidance on career development.	10.0% (3)	66.7% (20)	16.7% (5)	3.3% (1)	3.3% (1)
36. Programs are available for non-practice faculty to					

orient them to the pharmacy profession and professional education.	0.0% (0)	30.0% (9)	43.3% (13)	6.7% (2)	20.0% (6)
37. Programs are available to me to improve my teaching and to facilitate student learning.	23.3% (7)	76.7% (23)	0.0% (0)	0.0% (0)	0.0% (0)
38. Programs are available to me that help me develop my competence in research and/or scholarship.	10.0% (3)	50.0% (15)	26.7% (8)	10.0% (3)	3.3% (1)
39. I attend at least one or more scientific/professional association meetings per year.	43.3% (13)	33.3% (10)	13.3% (4)	10.0% (3)	0.0% (0)
40. I am offered funding to attend at least one scientific/professional association meeting per year.	13.3% (4)	43.3% (13)	26.7% (8)	10.0% (3)	6.7% (2)

## **SECTION VII: Curriculum, Teaching, and Assessment**

<b>Indicate the degree to which you agree or disagree with these statements.</b>					
	<b>Strongly Agree</b>	<b>Agree</b>	<b>Disagree</b>	<b>Strongly Disagree</b>	<b>Unable to Comment</b>
41. I encourage students to assume responsibility for their own learning.	53.3% (16)	46.7% (14)	0.0% (0)	0.0% (0)	0.0% (0)
42. I encourage students to participate freely in class.	50.0% (15)	50.0% (15)	0.0% (0)	0.0% (0)	0.0% (0)
43. Laboratories and simulated environments (e.g., model pharmacy) are adequate to support our college/school's educational mission.	10.0% (3)	46.7% (14)	23.3% (7)	13.3% (4)	6.7% (2)
44. The curriculum is consistent with the collective vision of the faculty and administration.	3.3% (1)	56.7% (17)	23.3% (7)	10.0% (3)	6.7% (2)
45. I am appropriately consulted in curricular matters.	10.0% (3)	53.3% (16)	20.0% (6)	13.3% (4)	3.3% (1)
46. I understand the organization and structure of the curriculum.	20.0% (6)	70.0% (21)	6.7% (2)	0.0% (0)	3.3% (1)
47. I understand how my course(s) fit(s) into the curriculum.	36.7% (11)	60.0% (18)	0.0% (0)	0.0% (0)	3.3% (1)
48. The curriculum is taught at a depth that supports understanding of central concepts and principles.	16.7% (5)	56.7% (17)	20.0% (6)	3.3% (1)	3.3% (1)
49. The curriculum encourages longitudinal and cross-course collaboration among pharmaceutical science and practice faculty.	10.0% (3)	20.0% (6)	40.0% (12)	26.7% (8)	3.3% (1)
50. The college/school uses the analysis of assessment measures to improve the curriculum and its delivery.	10.0% (3)	36.7% (11)	40.0% (12)	0.0% (0)	13.3% (4)
51. The college/school uses the analysis of assessment measures to improve student learning and the achievement of the professional competencies.	6.7% (2)	36.7% (11)	40.0% (12)	3.3% (1)	13.3% (4)
52. gather and use specific information (e.g., patient histories, medical records) to identify patient medication-related problems.	26.7% (8)	66.7% (20)	0.0% (0)	0.0% (0)	6.7% (2)
53. develop a patient care plan to manage each medication-related problem.	36.7% (11)	53.3% (16)	3.3% (1)	0.0% (0)	6.7% (2)
54. work with the health care team to implement the patient care plan.	30.0% (9)	60.0% (18)	0.0% (0)	0.0% (0)	10.0% (3)
55. document pharmaceutical care activities.	23.3% (7)	56.7% (17)	3.3% (1)	3.3% (1)	13.3% (4)
56. interpret epidemiologic data relevant to specific diseases and their management.	20.0% (6)	43.3% (13)	13.3% (4)	6.7% (2)	16.7% (5)
57. interpret pharmaco-economic data relevant to specific diseases and their management.	16.7% (5)	53.3% (16)	10.0% (3)	3.3% (1)	16.7% (5)
58. develop medication use criteria.	20.0% (6)	46.7% (14)	10.0% (3)	0.0% (0)	23.3% (7)
59. conduct and analyze medication use reviews.	23.3% (7)	43.3% (13)	13.3% (4)	0.0% (0)	20.0% (6)
60. identify and use risk reduction strategies to minimize					

medication errors.	16.7% (5)	43.3% (13)	23.3% (7)	0.0% (0)	16.7% (5)
61. communicate with patients, patients' agents, and health care providers.	33.3% (10)	60.0% (18)	0.0% (0)	0.0% (0)	6.7% (2)
62. exhibit professional attitudes and behaviors.	23.3% (7)	63.3% (19)	10.0% (3)	3.3% (1)	0.0% (0)
63. provide patient care in accordance with legal, ethical, social, economic, and professional guidelines.	23.3% (7)	70.0% (21)	3.3% (1)	0.0% (0)	3.3% (1)
64. assess the cost-effectiveness of a clinical service in a patient care setting.	13.3% (4)	60.0% (18)	13.3% (4)	0.0% (0)	13.3% (4)
65. work with other stakeholders (e.g., patients and other health professionals) to engender a team approach to assure appropriate use of health care resources in providing patient care.	20.0% (6)	60.0% (18)	13.3% (4)	0.0% (0)	6.7% (2)
66. assure that medication use systems minimize medication errors.	16.7% (5)	46.7% (14)	13.3% (4)	0.0% (0)	23.3% (7)
67. assure that medication use systems optimize patient outcomes.	16.7% (5)	46.7% (14)	13.3% (4)	0.0% (0)	23.3% (7)
68. interpret and apply drug use policy and health policy.	16.7% (5)	50.0% (15)	16.7% (5)	0.0% (0)	16.7% (5)
69. work with other stakeholders (e.g., patients and other health professionals) to identify and resolve problems related to medication use.	30.0% (9)	56.7% (17)	3.3% (1)	0.0% (0)	10.0% (3)
70. promote wellness and disease prevention services.	23.3% (7)	63.3% (19)	10.0% (3)	0.0% (0)	3.3% (1)
71. practice pharmacy in interprofessional and collaborative practice settings.	26.7% (8)	60.0% (18)	6.7% (2)	0.0% (0)	6.7% (2)
72. retrieve, evaluate and manage professional information and literature.	36.7% (11)	60.0% (18)	0.0% (0)	0.0% (0)	3.3% (1)
73. reflect critically on personal skills and actions and make plans to improve when necessary.	20.0% (6)	53.3% (16)	13.3% (4)	6.7% (2)	6.7% (2)
74. accept and respond to constructive feedback.	23.3% (7)	50.0% (15)	23.3% (7)	0.0% (0)	3.3% (1)

### **SECTION VIII: Developing and Supervising Students**

<b>Indicate the degree to which you agree or disagree with these statements.</b>					
	<b>Strongly Agree</b>	<b>Agree</b>	<b>Disagree</b>	<b>Strongly Disagree</b>	<b>Unable to Comment</b>
75. The college/school effectively manages <b>academic</b> misconduct by students (e.g., plagiarism).	10.0% (3)	50.0% (15)	30.0% (9)	6.7% (2)	3.3% (1)
76. The college/school effectively manages <b>professional</b> misconduct by students (e.g., repeated tardiness/absences, drug diversion).	3.3% (1)	36.7% (11)	43.3% (13)	10.0% (3)	6.7% (2)
77. The college/school effectively manages poor <b>academic performance</b> of students.	3.3% (1)	43.3% (13)	36.7% (11)	16.7% (5)	0.0% (0)
78. I am committed to fostering student leadership.	40.0% (12)	53.3% (16)	3.3% (1)	0.0% (0)	3.3% (1)
79. I am committed to developing professionalism in students.	63.3% (19)	36.7% (11)	0.0% (0)	0.0% (0)	0.0% (0)
80. I am committed to serving as a mentor and positive role model for students.	70.0% (21)	30.0% (9)	0.0% (0)	0.0% (0)	0.0% (0)
81. The college/school provides an environment and culture that promotes professional behavior among students, faculty, administrators, preceptors and staff.	20.0% (6)	60.0% (18)	0.0% (0)	16.7% (5)	3.3% (1)

### **SECTION IX: Academic Roles**

<b>Indicate the degree to which you agree or disagree with these statements.</b>					



	<b>Strongly Agree</b>	<b>Agree</b>	<b>Disagree</b>	<b>Strongly Disagree</b>	<b>Unable to Comment</b>
82. In my opinion, the expected proportion of my time spent on <b>teaching</b> is appropriate.	23.3% (7)	50.0% (15)	20.0% (6)	6.7% (2)	0.0% (0)
83. In my opinion, the expected proportion of my time spent on <b>research</b> is appropriate.	3.3% (1)	43.3% (13)	30.0% (9)	13.3% (4)	10.0% (3)
84. In my opinion, the expected proportion of my time spent on <b>service</b> is appropriate.	20.0% (6)	76.7% (23)	0.0% (0)	3.3% (1)	0.0% (0)
85. In my opinion, the expected proportion of my time spent on <b>clinical service</b> is appropriate.	10.0% (3)	50.0% (15)	13.3% (4)	3.3% (1)	23.3% (7)
86. All things considered, I am satisfied with my current job.	20.0% (6)	53.3% (16)	13.3% (4)	10.0% (3)	3.3% (1)

## PHARMACY FACULTY SURVEY SUMMARY REPORT FOR FERRIS STATE UNIVERSITY

Total number of responses: 21

2009

### SECTION I: Administrative System

Indicate the degree to which you agree or disagree with these statements.

	Strongly Agree	Agree	Disagree	Strongly Disagree	Unable to Comment
1. The college/school's administrators (e.g. Dean, Associate/Assistant Dean, Department Chair, Program Directors) have clearly defined responsibilities.	4.8% (1)	28.6% (6)	23.8% (5)	38.1% (8)	4.8% (1)
2. The college/school's administrators function as a unified team.	0.0% (0)	42.9% (9)	33.3% (7)	14.3% (3)	9.5% (2)
3. The college/school's administrator(s) are <b>aware</b> of my needs/problems.	19.0% (4)	66.7% (14)	9.5% (2)	4.8% (1)	0.0% (0)
4. The college/school's administrator(s) are <b>responsive</b> to my needs/problems.	14.3% (3)	57.1% (12)	19.0% (4)	9.5% (2)	0.0% (0)
5. The Dean is an effective leader of the college/school.	4.8% (1)	14.3% (3)	33.3% (7)	42.9% (9)	4.8% (1)
6. I am given the opportunity to provide evaluative feedback of the administrators.	14.3% (3)	14.3% (3)	28.6% (6)	38.1% (8)	4.8% (1)
7. I am aware that my college/school has policies for dealing with harassment and discrimination.	47.6% (10)	47.6% (10)	0.0% (0)	0.0% (0)	4.8% (1)
8. The committee responsible for <b>assessment</b> is effective.	9.5% (2)	28.6% (6)	33.3% (7)	4.8% (1)	23.8% (5)
9. The committee responsible for the <b>curriculum</b> is effective.	19.0% (4)	71.4% (15)	0.0% (0)	4.8% (1)	4.8% (1)
10. Faculty meetings function effectively as part of the governance of the college/school.	14.3% (3)	52.4% (11)	19.0% (4)	14.3% (3)	0.0% (0)

## **SECTION II: Recruitment and Retention**

<b>Indicate the degree to which you agree or disagree with these statements.</b>					
	<b>Strongly Agree</b>	<b>Agree</b>	<b>Disagree</b>	<b>Strongly Disagree</b>	<b>Unable to Comment</b>
11. The college/school uses an effective faculty recruitment process.	9.5% (2)	47.6% (10)	33.3% (7)	4.8% (1)	4.8% (1)
12. I have access to documents that detail policies related to my performance as a faculty member.	19.0% (4)	47.6% (10)	28.6% (6)	0.0% (0)	4.8% (1)
13. My performance assessment criteria are explicit and clear.	14.3% (3)	42.9% (9)	28.6% (6)	9.5% (2)	4.8% (1)
14. My allocation of effort has been clearly stated.	4.8% (1)	38.1% (8)	33.3% (7)	14.3% (3)	9.5% (2)
15. Criteria for my performance assessment are consistent with my responsibilities.	4.8% (1)	57.1% (12)	19.0% (4)	9.5% (2)	9.5% (2)
16. I am encouraged to engage in scholarly activity.	33.3% (7)	52.4% (11)	9.5% (2)	4.8% (1)	0.0% (0)
17. I receive formal feedback on my performance on a regular basis.	4.8% (1)	33.3% (7)	47.6% (10)	14.3% (3)	0.0% (0)
18. The performance feedback I receive is effective.	9.5% (2)	47.6% (10)	23.8% (5)	9.5% (2)	9.5% (2)
19. The college/school consistently applies <b>promotion and/or tenure</b> policies and procedures.	14.3% (3)	61.9% (13)	4.8% (1)	9.5% (2)	9.5% (2)

### **SECTION III: Infrastructure**

<b>Indicate the degree to which you agree or disagree with these statements.</b>					
	<b>Strongly Agree</b>	<b>Agree</b>	<b>Disagree</b>	<b>Strongly Disagree</b>	<b>Unable to Comment</b>
20. I receive adequate support staff resources.	19.0% (4)	33.3% (7)	28.6% (6)	19.0% (4)	0.0% (0)
21. I have adequate office space.	47.6% (10)	38.1% (8)	9.5% (2)	4.8% (1)	0.0% (0)
22. I have adequate laboratory and/or clinical resources for my research and/or scholarship needs.	14.3% (3)	52.4% (11)	9.5% (2)	14.3% (3)	9.5% (2)
23. I have adequate laboratory and/or clinical space for my research and/or scholarship needs.	19.0% (4)	47.6% (10)	9.5% (2)	14.3% (3)	9.5% (2)
24. Computer resources are adequate for my academic responsibilities.	52.4% (11)	38.1% (8)	4.8% (1)	4.8% (1)	0.0% (0)
25. I have access to library and other educational resources.	66.7% (14)	28.6% (6)	4.8% (1)	0.0% (0)	0.0% (0)
26. The college/school has appropriate physical facilities to allow me to fulfill my responsibilities.	23.8% (5)	66.7% (14)	0.0% (0)	9.5% (2)	0.0% (0)
27. The college/school has a sufficient number of qualified faculty.	0.0% (0)	33.3% (7)	42.9% (9)	19.0% (4)	4.8% (1)
28. The program's resources can accommodate present student enrollment.	9.5% (2)	19.0% (4)	33.3% (7)	33.3% (7)	4.8% (1)
29. The physical facilities enable out-of-class interaction among administration, faculty, and students.	9.5% (2)	52.4% (11)	23.8% (5)	9.5% (2)	4.8% (1)
30. My campus work environment is safe.	57.1% (12)	42.9% (9)	0.0% (0)	0.0% (0)	0.0% (0)

#### **SECTION IV: Role and Governance**

<b>Indicate the degree to which you agree or disagree with these statements.</b>					
	<b>Strongly Agree</b>	<b>Agree</b>	<b>Disagree</b>	<b>Strongly Disagree</b>	<b>Unable to Comment</b>
31. The college/school effectively employs strategic planning.	4.8% (1)	61.9% (13)	19.0% (4)	9.5% (2)	4.8% (1)
32. The college/school requested my input during the development of the current strategic plan.	23.8% (5)	33.3% (7)	23.8% (5)	14.3% (3)	4.8% (1)

## **SECTION V: Faculty Development**

<b>Indicate the degree to which you agree or disagree with these statements.</b>					
	<b>Strongly Agree</b>	<b>Agree</b>	<b>Disagree</b>	<b>Strongly Disagree</b>	<b>Unable to Comment</b>
33. I receive adequate guidance on career development.	9.5% (2)	66.7% (14)	19.0% (4)	4.8% (1)	0.0% (0)
34. Funds are available to support my faculty development.	4.8% (1)	57.1% (12)	23.8% (5)	4.8% (1)	9.5% (2)
35. Programs are available for non-practice faculty to orient them to the pharmacy profession and professional education.	4.8% (1)	28.6% (6)	28.6% (6)	4.8% (1)	33.3% (7)
36. Programs are available to me to improve my teaching and to facilitate student learning.	47.6% (10)	47.6% (10)	4.8% (1)	0.0% (0)	0.0% (0)
37. Programs are available to me that help me develop my competence in research and/or scholarship.	19.0% (4)	33.3% (7)	23.8% (5)	14.3% (3)	9.5% (2)

## **SECTION VI: Curriculum, Teaching, and Assessment**

<b>Indicate the degree to which you agree or disagree with these statements.</b>					
	<b>Strongly Agree</b>	<b>Agree</b>	<b>Disagree</b>	<b>Strongly Disagree</b>	<b>Unable to Comment</b>
38. Overall, faculty encourage students to assume responsibility for their own learning.	19.0% (4)	61.9% (13)	14.3% (3)	4.8% (1)	0.0% (0)
39. Laboratories and other non-classroom environments are conducive to learning.	14.3% (3)	61.9% (13)	4.8% (1)	4.8% (1)	14.3% (3)
40. The curriculum is consistent with the collective vision of the faculty and administration.	19.0% (4)	57.1% (12)	14.3% (3)	4.8% (1)	4.8% (1)
41. Faculty are consulted in curricular matters.	47.6% (10)	47.6% (10)	4.8% (1)	0.0% (0)	0.0% (0)
42. The organization and structure of the curriculum is clear.	33.3% (7)	61.9% (13)	4.8% (1)	0.0% (0)	0.0% (0)
43. I understand how my instructional content fits into the curriculum.	33.3% (7)	57.1% (12)	9.5% (2)	0.0% (0)	0.0% (0)
44. The curriculum is taught at a depth that supports understanding of central concepts and principles.	23.8% (5)	57.1% (12)	9.5% (2)	0.0% (0)	9.5% (2)
45. Curricular collaboration among disciplines is encouraged at my college/school.	14.3% (3)	57.1% (12)	19.0% (4)	4.8% (1)	4.8% (1)
46. The college/school uses programmatic assessment data to improve the curriculum.	9.5% (2)	28.6% (6)	19.0% (4)	9.5% (2)	33.3% (7)
<b>The Pharm.D. Program prepares students to ...</b>					
47. develop and use patient-specific pharmacy care plans.	38.1% (8)	61.9% (13)	0.0% (0)	0.0% (0)	0.0% (0)
48. effectively manage a patient-centered pharmacy practice.	42.9% (9)	42.9% (9)	9.5% (2)	0.0% (0)	4.8% (1)
49. develop disease management programs.	28.6% (6)	23.8% (5)	23.8% (5)	4.8% (1)	19.0% (4)
50. manage the system of medication use.	33.3% (7)	61.9% (13)	0.0% (0)	0.0% (0)	4.8% (1)
51. promote the availability of health promotion and disease prevention initiatives.	28.6% (6)	61.9% (13)	4.8% (1)	4.8% (1)	0.0% (0)
52. communicate with patients, caregivers, and other members of the interprofessional health care team.	47.6% (10)	52.4% (11)	0.0% (0)	0.0% (0)	0.0% (0)
53. search the health sciences literature.	52.4% (11)	47.6% (10)	0.0% (0)	0.0% (0)	0.0% (0)
54. evaluate the health sciences literature.	52.4% (11)	47.6% (10)	0.0% (0)	0.0% (0)	0.0% (0)
55. demonstrate expertise in the area of informatics (resources, devices, and methods required to optimize the acquisition, storage, retrieval, and use of information in pharmacy and healthcare).	28.6% (6)	52.4% (11)	14.3% (3)	0.0% (0)	4.8% (1)
56. apply state and federal laws and regulations to the practice of pharmacy.	33.3% (7)	57.1% (12)	4.8% (1)	0.0% (0)	4.8% (1)
57. maintain professional competence.	23.8% (5)	71.4% (15)	4.8% (1)	0.0% (0)	0.0% (0)

## **SECTION VII: Developing and Supervising Students**

<b>Indicate the degree to which you agree or disagree with these statements.</b>					
	<b>Strongly Agree</b>	<b>Agree</b>	<b>Disagree</b>	<b>Strongly Disagree</b>	<b>Unable to Comment</b>
58. The college/school provides an environment and culture that promotes professional behavior among students, faculty, administrators, preceptors and staff.	19.0% (4)	66.7% (14)	9.5% (2)	4.8% (1)	0.0% (0)
59. The college/school effectively manages <b>academic</b> misconduct by students (e.g., plagiarism).	14.3% (3)	57.1% (12)	19.0% (4)	0.0% (0)	9.5% (2)
60. The college/school effectively manages <b>professional</b> misconduct by students (e.g., repeated tardiness/absences, drug diversion).	14.3% (3)	42.9% (9)	9.5% (2)	4.8% (1)	28.6% (6)
61. The college/school effectively manages poor academic <b>performance</b> of students.	14.3% (3)	42.9% (9)	28.6% (6)	9.5% (2)	4.8% (1)



## **SECTION VIII: Academic Roles**

<b>Indicate the degree to which you agree or disagree with these statements.</b>					
	<b>Strongly Agree</b>	<b>Agree</b>	<b>Disagree</b>	<b>Strongly Disagree</b>	<b>Unable to Comment</b>
62. In my opinion, the proportion of my time spent on <b>teaching</b> is appropriate.	23.8% (5)	61.9% (13)	14.3% (3)	0.0% (0)	0.0% (0)
63. In my opinion, the proportion of my time spent on <b>research</b> is appropriate.	19.0% (4)	33.3% (7)	33.3% (7)	9.5% (2)	4.8% (1)
64. In my opinion, the proportion of my time spent on <b>service</b> is appropriate.	19.0% (4)	66.7% (14)	9.5% (2)	4.8% (1)	0.0% (0)
65. In my opinion, the proportion of my time spent on <b>clinical service</b> is appropriate.	19.0% (4)	42.9% (9)	19.0% (4)	4.8% (1)	14.3% (3)

## **SECTION IX: Demographic Information**

<b>67. Rank</b>	<b>Response Percent</b>	<b>Response Total</b>
Dean	0.0%	0
Associate Dean	0.0%	0
Assistant Dean	0.0%	0
Professor	42.1%	8
Associate Professor	31.6%	6
Assistant Professor	21.1%	4
Lecturer	0.0%	0
Instructor	5.3%	1
Other	0.0%	0
<b>68. Number of years in academia</b>	<b>Response Percent</b>	<b>Response Total</b>
less than 2	5.3%	1
2-5	26.3%	5
6-10	21.1%	4
11-15	31.6%	6
16-20	10.5%	2
more than 20	5.3%	1
<b>69. Tenure Status</b>	<b>Response Percent</b>	<b>Response Total</b>
Tenured Track	84.2%	16
Nontenured, Tenure Track	10.5%	2
Nontenure Track	5.3%	1
Institution does not have a tenure system	0.0%	0
<b>70. Discipline</b>	<b>Response Percent</b>	<b>Response Total</b>
Biological Sciences	0.0%	0
Continuing Professional Education	0.0%	0
Liberal Arts	0.0%	0
Library/Educational Resources	0.0%	0
Medicinal Chemistry	5.3%	1
Pharmaceutics	10.5%	2
Pharmacology	5.3%	1
Social & Administrative Sciences	10.5%	2
Pharmacy Practice	63.2%	12
Other	5.3%	1
<b>71. Type of Appointment</b>	<b>Response Percent</b>	<b>Response Total</b>
Full-time	94.7%	18
Part-time	5.3%	1
<b>72. Teach location</b>	<b>Response Percent</b>	<b>Response Total</b>
Main campus	26.3%	5
Branch campus (enter city and state)	36.8%	7
Satellite campus (enter city and state)	21.1%	4
Other	15.8%	3