Academic Senate

Agenda for the Meeting of April 7, 2015, 10:00 a.m. **University Center 202C**

- 1. Call to Order and Roll Call
- 2. Approval of Minutes A. March 3, 2015 minutes
- 3. Open Forum
- 4. Reports
 - A. Senate President Khagendra Thapa
 - B. Senate Vice President Charles Bacon
 - C. Senate Secretary Amy Dinardo
- 5. Committee Reports
 - A. University Curriculum Committee Kemi Fadayomi
 - B. Student Government Andrew Kalinowski
 - C. IT Survey Update Charles Bacon
- 6. New Business
 - A. Health Promotion Committee Status

B. Degree Title Change – BS in Business Professional Golf Management to BS in Business PGA Golf – Fadayomi

C. Close Theater Minor – Fadayomi

- D. New Degree Program BS in Industrial Chemistry Fadayomi
- E. New Degree Bachelor of Science in Spanish for the Professions Fadayomi
- 7. Announcements
 - A. FSU President David Eisler
 - B. Interim Provost Paul Blake
 - C. Senate President Khagendra Thapa
- 8. Open Forum
- 9. Adjournment

Minutes Ferris State University Academic Senate Meeting University Center 202C March 3, 2015

Members in Attendance: Alspach, Bacon, C., Bacon, M., Balanda, Baran, Barnett, Berghoef, Brandly, Brecken, Dakkuri, Daubert, Dinardo, Drake, Fadayomi, Fagerman, Fox, Ing, Isler, Klatt, Moore, Piercey, Richmond, Rumpf, Thapa, Todd, Tower, Wancour

Members absent with cause: Bajor, Baker, Baran, Griffin, Wagenheim

Members absent: Groves, Hanna, Jenerou, Potter, Siahpush, Yowtz

Ex Officio and Guests: Durst, Franklund, Cliff, Kalinowski, Nicol, Reifert, Dawson, Krueger, Shoemaker, Urbanick, Goosen, Rosen, Wilber, Franklund, Carrie

1.	President Khagendra Thapa opened the meeting at 10:03 a.m.
2.	Approval of Minutes. Senator moved to approve the September 2, 2014 minutes A. Baran seconded. Motion passed.
3.	 Open Forum A. Senator Sandra Alpsach announced that students going to Grand Rapids from the Big Rapids Campus for the Chavez Social Justice March. The march supports the Latino Community. Also President Cameron Schoemaker of the Order Omega won an award for GPA at the National Council. Phi Sigma Sigma raised \$240,000. B. Fran Rosen announced that David Pilgrim from the Diversity and Inclusion office encourages us to participate in Diversity and Inclusion climate survey to contribute to the new plan. The survey will be available March 16-April 3rd. All faculty, students, and staff will get an e-mail prompting them to take it. It will be quick to complete and everyone is eligible for prizes.
4.	 Officer Reports A. President Khagendra Thapa said that President Eisler will not be at the meeting today and Interim Provost Blake will be late. He introduced Dr. Krueger from Emeriti. B. Vice-President Bacon discussed the report from the IT Committee where 288 constituents university-wide completed the IT fill survey responding to questions about the current plan. Bacon reviewed the results from the Senators. He encouraged more responses from Senators by the end of Spring Break. C. Secretary Dinardo announced that there will be an Open Forum for anyone concerned about changes or modifications to the Senate Charter. It will be held on March 24, 2015 at 11am in MCO 234. Everyone is encouraged to attend.
5.	 Committee Reports. A. University Curriculum Committee Chair Kemi Fadayomi : The UCC has approved 11 new proposals. One was a modification to the industrial technical management. One concern was that there was no single tenure-track faculty in the program. B. Student Government President Andrew Kalinowski passed around an update for the remainder of the Spring Semester. Updates for Elections, Guest Speakers, External Entity Representation, etc. The goal is to increase voting/election participating by 100%. He asked Senators to encourage students to participate. Kalinowski reviewed some of the 34 committees that students can be involved in along with contact information. He also reviewed ongoing events for the Winter Semester such as the Leadership and Learning Conference to discuss diversity in the workplace (not exclusively for women). The Big Event is scheduled for April 18th- please let your students know. VP Bacon asked if there is more info online. Kalinowski instructed us to consult the University calendar. C. Election Committee, Senator Drake: The committee is established and nominations are due this Friday. The election will be online March 25-26th. He reviewed people up for re-election and seats that will be open.

6.	Clifton Franklund. General Education Coordinator Report: Why Change? As he has talked to various stakeholders in an effort to simplify plan he noticed that here was a little push-back. Why change? He would like to relate new changes to assessment data (at least what little FSU has) in order to drive change. If general education were to actually be revised appropriately, there should be changes. He realizes change is difficult, expensive, and takes work. He reviewed the 5 following main drivers for change: Dissatisfaction with A&S-centric model, incomplete alignment with employers needs and expectations, demographic challenges to current model, relative performance issues, and the need for systematic assessment. He further discussed demographic challenges due to data that is difficult to interpret. It appears that transfers are growing and FIDIACS are flat. Growth is occurring in online and international students. He reviewed the courses with the most transfer SCH (Student Credit Hour). Ten are core Gen. Ed courses. It appears that we deliver less on campus as we take more transferred SCH. We are delivering 40% in these 10 courses. (Are we really assessing Gen Ed?). In BIO 103, for example, we take 80% in transfer. This decreases our revenue stream. What are the reasons why students transfer credits? First cause is cost (community colleges to offer terminal degrees in nursing and engineering. He also mentioned rumblings about the the possibility of offering community college of for free. We then looked at grades from ENGL 150 and MATH 115 at Ferris vs Transfers. Transfers have a lower DFW, inferring that community colleges could make the argument that their courses are better. Franklund analyzed ENG 150 and MATH 115 grades in order to predict future performance in ENGL classes. In the A range, there is no difference. C students from FSU score a ½ letter grade lower than C student who transferred Sen. Balanda asked, "Who are the students from FSU score a ½ letter grade lower than C student who transferred Sen.
7.	New Business- New Hospitality Management BS Degree, Kemi Fadayomi: Kemi motioned, Mike Berghoef seconded. VP Bacon asked if there there was any correlation or overlap between the fermentation program and this program? (No). It was pointed out there is competition from other schools who are creating similar programs. The motion passed.
7.	 Announcements/Open Forum A. Senator Drake asked if someone vote for another Senator if they step out. The answer was no. B. Senator Fagerman asked if there is a plan to involve more tenure track faculty representatives when programmatic changes are made. What is done if there is no tenure track representative involved and adjunct faculty have good proposals? Bacon replied that it is against the FFA contract. Balanda stated that lack of tenure track faculty involvement it is becoming more of a problem when senior faculty members retire. Should there be at least one tenured faculty member in the program? C. Mike Berhoef thanked to Cliff Franklund for the helpful presentation. It would be interesting to get some qualitative data on why students are taking courses elsewhere. D. Melinda Isler announced an event on March 24th for Women's History Month. Trisha Franzen, professor at Albion College and author of the new biography of Anna Howard Shaw, will visit Big Rapids on March 24th. She will do a session about doing research at 11 a.m. and a public presentation at 7 p.m. The 11 a.m. event is in the FLITE Reading Room (FLITE 240). E. Senator Adnan Dakkuri expressed concern about dwindling attendance at Senate meetings.
9.	Dinardo moved to close the meeting at 11:14 a.m. Piercey seconded Motion passed.

Respectfully submitted, Amy Dinardo Secretary



FERRIS STATE UNIVERSITY COLLEGE OF ARTS AND SCIENCES

Biological Sciences

March 6, 2015

To: Dr. Charles Bacon and Members of the Academic Senate

RE: Status of the Health Promotion Committee as an Academic Senate subcommittee.

Dear Dr. Bacon,

I am writing this letter on behalf of the Health Promotion and Substance Abuse Prevention Subcommittee of the Ferris State Academic Senate. I have been a member of this committee for three years, and during this time we have struggled with how to best address the goals set forth in our mission statement. Attached, you will find a letter written by Tom Liszewski, a long-time ex-officio member of our committee, that details the history of this committee since it was founded. It is worthy to note that the Health Promotion Committee was originally funded by a grant that was approved in 1996. Since this grant has expired, the committee has continued to meet, but with little to no productivity. Many committee members have had excellent ideas to promote health-related issues (e.g. sexual health awareness, substance abuse prevention, managing stress and anxiety), but as a whole, we feel that the current structure of the committee does not empower or enable us to achieve our goals or carry out our ideas to promote health on campus.

Recently, in an effort to better understand how we might better address our mission statement, the members of our committee investigated the roles and duties of healthrelated committees at 17 comparable institutions. Attached, please find a report that details our findings. Briefly, we found that the majority of institutions investigated do not have a faculty senate committee devoted to Health, Health Promotion, or Substance Abuse Prevention. Therefore, we recommend that the Academic Senate consider the removal of the Health Promotion Committee as an Academic Senate sub-committee. In addition, we support the founding of a related task force, comprised of students, faculty, and health support staff, to be modeled after the "Student Health Advisory Committee" at the University of Wisconsin, Oshkosh, and the "Student Health Care Committee" at the University of Wisconsin, Platteville. The Director of the Birkham Health and Counseling Center, Renee VanderMyde, also willingly supports the founding of such a task force and is open to serving as chair if requested.

Thank you for your time and consideration. We look forward to discussing this further.

Sincerely Anne Spain

Associate Professor of Biology 820 Campus Drive Big Rapids, MI 49307-2225

Phone: (231) 591-2550



FERRIS STATE UNIVERSITY COUNSELING CENTER

rebituary 10, 2013

To: The members of the Health Promotion and Substance Abuse Prevention Sub-Committee of the Ferris State University Academic Senate

RE: The history and future of this committee

In our last meeting of the Health Promotion and Substance Abuse Prevention committee it was decided to request of the Academic Senate that this committee would no longer be a subcommittee of the senate so that it could open up the membership of the committee to other staff who have association to other health related areas of the campus community. For example, the Director of the Birkam Health & Counseling Center has indicated an interest in chairing this committee (it currently has no chair) and would like to invite other health providers who are not faculty to join the committee such as the physician, physician assistant, and nurses of the Health & Counseling Center. In addition, perhaps staff & faculty of the College of Allied Health Science.

To this end I agreed to write a brief history of the committee as its longest standing member of fifteen years. I believe that this committee was formed as a requirement of a FIPSE grant that was approved in 1996 (and implemented in 1998/99) by the U.S. Department of Education (Drug and Violence Prevention Program). This grant was written by a former faculty member Lenny Shibble of the Birkam Health & Counseling Center. The grant was called "GOTCHA-Groovy Option to Chillin" without Having Alcohol". This grant basically provided 'Alcohol Free Karaoke' on ('thirsty') Thursdays in the Rankin Student Center.

Lenny Shibble left the university in 1999 to become the health educator at Northern Michigan University. I was hired in 2000 as primarily a mental health and substance abuse counselor with some health education responsibilities to replace him. In the academic year 2000-2001 I was assigned as the Ex-officio member of this committee. The grant had expired but there remained some momentum from the grant and the committee continued doing some good work with some projects that included encouraging more Friday classes, curriculum infusion, and some 'social norming' projects. In the mid 2000's the committee partnered with a RSO 'Campuses against Cancer' and helped promote the 'Great American Smoke-Out' events. Then that RSO pretty much took over that event due to their growing membership. For the last ten years or so it has not had much direction or traction as evidenced by attendance and minutes and lack thereof. For the past five years there has been perennial discussion about disbanding or restructuring this committee. This committee only meets about a half-dozen times during the academic year so it is difficult to accomplish much. At present the current committee feels it could still be relevant if restructured to include other heath related professionals in the campus community to join its membership. I support this idea.

Sincerely,

Thomas R. Liszewski

Thomas R. Liszewski, MA, Licensed Professional Counselor

1019 Campus Drive 210 Birkam Health Center Big Rapids, MI 49307-2280

Phone: (231) 591-5968 Fax: (231) 591-5336 Web: www.ferris.edu **<u>Report Title</u>:** Health Promotions on Peer Campuses <u>**Compiled by:**</u> Academic Senate Health Promotion Committee Members **Date:** February 10, 2015

Objective: To examine mission statements and goals of Health Promotion Committees (or similar) at comparable institutions

<u>Summary of Findings</u>: The majority of institutions investigated do not have a faculty senate committee devoted to Health, Health Promotion, or Substance Abuse Prevention.

<u>Committee Recommendation</u>: To remove the Health Promotion Committee as an Academic Senate sub-committee. We believe we lack the support to carry out the committee's mission statement. In addition, we support the founding of a related task force, comprised of students, faculty, and health support staff, to be modeled after the "Student Health Advisory Committee" at the University of Wisconsin, Oshkosh, and the "Student Health Care Committee" at the University of Wisconsin, Platteville.

Assigned Peer Institutions:

1) Austin Peay State University (Anne Spain)

2) Clarion University of Pennsylvania (Anne Spain)

3) Indiana University Purdue University Indianapolis (Anne Spain)

4) Troy University (Teresa Bailey)

5) University Central Missouri (Teresa Bailey)

6) University Wisconsin Whitewater (Teresa Bailey)

7) Weber State University (Tom Liszewski)

8) Youngstown State University (Tom Liszewski)

9) Cameron University (Tom Liszewski)

10) Saginaw Valley State University (Ali Konieczny)

11) University Southern Indiana (Ali Konieczny)

12) University Wisconsin, Oshkosh (Ali Konieczny)

13) University Wisconsin, Platteville (Ali Konieczny)

14) University Wisconsin, River Falls (Marie Yowtz)

15) Western Michigan University (Marie Yowtz)

16) Central Michigan University (Marie Yowtz)

17) Grand Valley State University (Marie Yowtz)

Findings from Anne Spain:

Health Promotion Committee – Description of Committee Mission at Comparable Institutions

1. Austin Peay State University

- a. No Health Promotion Committee (or similar) found.
- b. For a list of university committees, see: http://www.apsu.edu/governance/stand
- 2. Clarion University of Pennsylvania

- a. No Health Promotion Committee (or similar) found.
- b. For a list of university committees, see: <u>http://www.clarion.edu/aboutclarion/leadership/faculty-senate/Senate-Committee-List-2013-14.pdf</u>
- 3. Indiana University Purdue University Indianapolis
 - a. No Health Promotion Committee (or similar) found.
 - b. For a list of university committees, see: http://www.iupui.edu/~fcouncil/committees/

Based on the above, I would say having a health promotions committee at the faculty level is not the norm, and that perhaps the mission of our committee could be absorbed by another group, e.g. Student Affairs.

Findings from Teresa Bailey: Teresa contacted her peer institutions and received the following responses:

University Wisconsin Whitewater: We do not have any standing committee on this issue. The topic is primarily addressed by the university health center and the division of student services.

In reviewing your link I did wonder about other related health issues such as mental illness, depression and disorders such as obsessive compulsive disorders. The issue of sexual assault and more important prevention of sexual assault also may be considered.

A few links from our web site http://www.uww.edu/uhcs/wellness-information

(above information came from the Chair of the Faculty Senate)

Findings from Tom Liszewski:

No information was found regarding Health Related Committees at the three universities, Weber State University, Youngstown State University, and Cameron University.

Findings from Ali Konieczny

10) Saginaw Valley State University: SVSU has *Student Wellness Programs*: http://www.svsu.edu/phe/

This program has a Director of Student Wellness, and looking at the list of Staff, it appears that she is the sole employee, but there are numerous interns listed on the staff page, including:

- Environmental Sustainability Intern
- Sexual Responsibility Intern
- Wellness Intern
- Tobacco and Other Drug Prevention Intern
- Sexual Assault Prevention and Education Intern
- Alcohol Prevention and Education Intern

University Health is a MedExpress operated by Covenant Health Care Systems.

11) University of Southern Indiana: USI has the *Make the First Move* program: http://www.usi.edu/makethefirstmove

This program encourages students to act, and focuses on the topics of alcohol use, alcohol emergencies, anger, depression and suicide, discrimination, disordered eating, drug use, gambling, hazing, relationship violence, self-injuring, and sexual assault. USI also has the *Care Team*: <u>http://www.usi.edu/deanofstudents/careteam</u> "The University's CARE Team is a cross-functional assessment group, chaired by the Dean of Students, that responds to students in apparent/potential distress. C.A.R.E. stands for Campus Action Response and Engagement (CARE) of students in distress. The CARE team works collaboratively to provide confidential, respectful, and proactive support, while offering resources and balancing the educational needs of students within the overall mission of the University." Resources students are directed to involving health & wellness are the following:

- Alcohol and Drug Intervention Prevention (informational website)
- Counseling Center
- Housing and Residence Life
- Mental and Physical Health Emergency Policy
- Multicultural Center
- Office of Public Safety
- Religious life
- SAFE Ride
- Services for Students with Disabilities
- Sexual Assault Programs
- University Health Center

12) University of Wisconsin, Oshkosh: This University has the *Student Health Advisory Committee*. The below information is from the following link: http://www.uwosh.edu/studenthealth/additional-information/student-health-advisory-committee

"Student Health Advisory Committee

The **purpose** of this committee is to:

- Act as an advisory committee to the Student Health Center.
- Be a liaison between students and Student Health Center administration.
- Provide feedback and input into services, programs, budget and fees.
- Provide health outreach to the campus community.

Structure:

Meetings are held twice per semester during the academic year.

• The minutes are sent to each member, the Vice Chancellor of Student Affairs and Oshkosh Student Association (OSA) office.

Recommendations are made based on the consensus of members.

Student Members:

- Membership is open to all registered students.
- Members are appointed annually by OSA in the beginning of the academic year.
- All student members are voting members.

• The Director of the Student Health Center serves as the chair and as an ex-officio member.

Interested in becoming a Member?

If you are interested in health or health care administration, please consider volunteering to serve on this committee. You will discuss and make recommendations about health policy, fees, marketing, the budget, etc.

It is an opportunity to network with other students interested in health. Many students have elected to stay on the committee for two or three years.

For more information about getting appointed to this committee, call Pamela MacWilliams, Director Student Health Center at (920) 424-0425 or email her at macwillp@uwosh.edu."

Additionally, the University of Wisconsin, Oshkosh's Student Health Center provides multiple health promotion services: <u>http://www.uwosh.edu/studenthealth/services/health-promotion</u> Listed health promotion services include health advocates (peer mentors in each residence hall), smoking cessation, and health education on topics such as sexual health, nutrition, sleep hygiene, smoking cessation, stress/anxiety management, and general wellness.

13) University of Wisconsin, Platteville: The University has the Student Health Care Committee. Information below is from the following link: <u>http://www.uwplatt.edu/employee-handbook/shcc-responsibilities-and-membership</u>

SHCC RESPONSIBILITIES AND MEMBERSHIP

RESPONSIBILITIES

 Evaluates current student insurance plans and recommends to the Assistant Chancellor for Business Affairs and the Assistant Chancellor for Student Affairs any change in plans or benefits involving students.

- Recommends and reviews policies regarding fees for health services, staffing of the Health Center, and procedures in the Health Center.
- Publicizes the health services available and informs the University community about current health problems.
- Evaluates the effectiveness of the health services on campus.
- Promotes a wellness-oriented life style on campus.

MEMBERSHIP

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- Size (6) faculty, including one from the department of Health & Physical Education.
- One (1) academic staff.
- Three (3) students chosen by Student Senate.
- Ex-Officio (non-voting):
- o Campus Physician
- o Director of the Pioneer Activity Center
- Chair of the AIDS Task Force
- Student Services
- Office of Students with Disabilities
- Student Health Services
- Student Assistance Program
- Food Services

Meeting agendas and minutes are available at the following link: http://www.uwplatt.edu/provost/shcc-agenda-and-minutes

Findings from Marie Yowtz:

Health Promotion Committee findings 14) University Wisconsin, River Falls

- Student Health Advisory Committee
- Comprised of faculty and staff
- Role: To serve as an advisory group regarding services and programming offered through Student Health and Counseling Services. I.e. health issues that concern students, collaborate with efforts of organizations on campus

15) Western Michigan University

- Western Wellness Committee (for employees)
- Comprised of faculty and staff

• Mission: It is the mission of Western Wellness to promote and improve the wellness of the campus community by empowering each employee to adopt and maintain healthy behaviors and create a healthy culture thereby improving productivity and reducing health care costs.

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• No senate committee linked to health

16) Central Michigan University

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• Health and Wellness program via HR (similar to GVSU)

17) Grand Valley State University

- Several departments to work with wellness
- Health and Wellness housed as stand-alone dept.
 - Our mission is to promote and encourage healthy lifestyles for faculty and staff to enhance the quality of life among the GVSU community and their families.
- Programming includes: ambassador program; ergonomics etc.

Form A

Revised Jan. 2015

PROPOSAL SUMMARY AND ROUTING FORM

Proposal Title: Change Title of Degree from BS in Business Professional Golf Management to BS in Business PGA Golf Management

Initiating Individual: Aaron Waltz Initiating Department or Unit: SEHM/PGA Golf Management

Contact Person's Name: Aaron Waltz Email: AaronWaltz@ferris.edu Phone: 231 591 2380

Group I-A - New Degree, major, concentration, minor, or redirection of a current offering

C Group I-B - Deletion of a degree, major, concentration, or minor

□ Group II-A – New Course, modification of a course, deletion of a course

Group II-8 – Minor Curriculum Clean-up Changing name of degree only

□ Group III ~ Certificate (□ College Credit □ Non-credit □ New Certificate)

□ Group IV – Other site location (□ College Credit □ Non-credit)

	PLEASE PRINT AND SIGN YOUR NAME	DATE	VOTE/ACTION * Number Count
Program Representative **	Aaron Waltz Clan M. Walf	Mards 2, 2415	Support Support with Concerns Not Support Abstain
Department/School/Faculty Representative Vote **	Aaron Waltz Claur M. Walt	Marci 2, 2015	5 Support Support with Concerns Not Support <u>1</u> Abstain
Department/School Administrator	Clame Briggs	March 2,2015	5 Support
College Curriculum Committee/Faculty	David Marion	Hach 17 2015	Support Support Not Support Abstain
UCC Representative	Richth !!	3/17/15	Support Hold Not Support
Dean	David Nicol	3(3)5	LSupport Support with Concerns Not Support Abstain
University Curriculum Committee **	Kemi Jaelanemi sep	3/23/15	Support Support with Concerns Not Support Abstain
Senate **	(<u> </u>	Support Support with Concerns Not Support Abstain
Academic Affairs	t must include Meetification of anothe		Support Hold Not Support

Support with Concerns or Not Support must include Identification of specific concern with appropriate rationale.

** Number Count must be given for all members present and/or voting.

To be completed by Academic Affairs

Date of Implementation:

	President (Date Ap	proved	Board	of Trustees (Date App	roved)	Acader	nic Officers of MI [[Date Approved)
1.	Proposal Summary: (Summary is generally less than one page. Briefly state what is proposed with a summary of rationale and highlights) In the Fall of 2008, PGA of America required all accredited university programs to change the name of their degree and program from "Professional Golf Management" (PGM) to "PGA Golf Management." This was to distinguish all PGA accredited programs (currently 19 universities) from the unaccredited universities offering a degree in PGM. This name change should have occurred in the Fall 2008 or Spring 2009. Now more than 6.5 years later, Ferris State University continues to use the non-accredited name to formally describe PGA Golf Management. This name change will correctly align Ferris State with the PGA of America.							
2 .	Summary of Currice	ular Action (Check a	ll that apply to this	proposal)				
	🗵 Degree Name	🗆 Major	🗆 Minor	Concentration		Certificate	Course	
	C New	Modification	Deletion					
	Name of Degree, M	lajor, etc.: Bachelor	of Science in Busin	iess PGA Golf Manage	ment			
Э.	Summary of All Co	urse Action Require	t is just a name	change – it does not	affect, A,	B, C, D, or E		
	A Newly Create	d Courses to be Adi	ded to the Catalog:	Not Applicable				
	Prefix		Number		Title			
	B. Courses to be Deleted from FSU Catalog: Not Applicable							
	Prefix		Number		Title			
	C. Existing Cours	ies to be Modified:	Not Applicable					
	Prefix		Number		Title			
	D. Addition of existing FSU courses to program: Not Applicable							
	Prefix		Number	ć	Title			
	E. Removal of ex Prefix	disting FSU courses	from program. No Number	t Applicable	Title			
4.	Summary of All Co	nsultations						
	Form Sent (B or C	Date Ser	ıt	Responding Depar	tment	Date R	eceived & By Whon	n
	Not Applicable							• ⊌
5.	Will External Accre	ditation be sought?	(For new program 7 No	ns or certificates only				
	lf yes, name the or	ganization involved	with accreditation	for this program				
6.	ls a PCAF required? posted	7 □ Yes ⊗ No	Is the PCAF appro	oved? 🗋 Yes 🗋 No	(If yes, s	upply link on Acad	emic Affairs websit	e where PCAF Is
7	Program Charksha	nts affected by thic	nrogeral (Chester-1	li blant namkı ta this as				

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 Program Checksheets affected by this proposal (Check all that apply to this proposal) None Applicable – Name Change only - Professional Golf Management Checksheet to PGA Golf Management Checksheet
 Add Course
 Delete Course
 Modify Course
 Change Prerequisite
 Move from required to elective 8. List all Checksheets affected by this proposal:

College College of Business

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Department Sports Entertainment Hospitality Management

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Program PGA Golf Management

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Name	CWID			
PGA ID	Katke #	Sta	Starting Date	
Bachelor of Science in Business - 1	SEQUENCE SHEET FOR Professional Golf Management - FERRI	S STATE UNIVERSITY	"FORM D Current"	
FIRST YEAR Fall Semester		SECOND YEAR Fail Semester		
* PGMG 101 - Orientation to PGM [Qualitynes Text] ENGL 150 - English 1	(1 m	ENGL 211/250 - (choose one) [ENGL 150 C-orbeite] Cultural Enrichment (2000) 10		
PSYC 150 - Introduction to Psychology COMM 121 - Fund. of Public Speaking	- m m	ECON 222 - Economics 2 (acover) ACCT 201 - Accounting 1 (Astrumonation	9 ¹ 09 ¹ 07	
MATH 115 (we make in		MKTG 321 - Principles of Marketing (sophemore satura)	u satus) جر	
Spring Semester * PGMG 201 - PGA Level 1 Study 1 [rowe nut	5	Spring Semester ACCT 202 - Accounting 2 (AccT 201 C. whene) A (MC3001 - Principles of A dwartisings of A dwa		
Scientific Understanding Elective Cultural Enrichment tree mue 1)	3:4 	MGMT 301 - Applied Management * PGMG 202 - PGA Level 1 Study 11 (result 201)		
MKTG 231 - Professional Selling (construct)	3 14/15	KEIU 27/ - Principles of Ketalling wate an	~ <u>-</u>	
<u>Summer Semester</u> PGMG 192 - Internship I prexici 201 Curbetter, see mate sj	61	<u>Summer Semester</u> PGMG 292 - Internship 2 (paxa 2020 or helter, see note 5)	(e 5) 2	
NOTES * Must take in semester designated 1. Check if Playing Ability Test (PAT) is passed 2. Prerequisites shown in brackets [] 3. Use as General Education Elective if you have 24 or higher ACT score. 4. You must take three (3) cultural enrichment courses. Select three (3) or	igher ACT score. select three (3) courses from the	ligher ACT score. Select three (3) courses from the cultural enrichment subject areas, including one at the 200 level or above.	ut the 200 level or above.	
Consult: http://www.lerris.edu/htmls/academics/gened/cultcourses.html 5. You <u>must</u> register for internships (PGMG 192, 292, 392, 492, and 493) in the semester they are taken. You <u>must</u> have a Cum. GPA of 2.00 or better.	<u>ilteourses.html</u>)2, 492, and 493) in the semester	they are taken. You <u>must</u> have a Cum. GPA of 2	2.00 or better.	

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B.S. BUSINESS - PRC	DFESSIONAL GOLF MAN	- PROFESSIONAL GOLF MANAGEMENT - FERRIS STATE UNIVERSITY	
THIRD YEAR <u>Fall Semester</u> PGMG 392 - Internship 3 (see soite 5)	01	FOURTH YEAR Fall Semester PGMG 492 - Internship 4 466 6016 51	c1
Spring Somester BLAW 321 - Contracts and Sales FINC 322 - Financial Management	1	<u>Spring Semester</u> PGMG 493 - Internship 5 _(see note 3)	 دا
(ACT 202.MATLOR) STQM 260 - Intro to Statistics(MATLUR) C- @benef * MGMT 310 - Small Business Management * RETG 339 - Retail Merchandising (RETG 337)		Summer Semester General Education Elective MKTG 425 - Marketing Research _{[MKT6321} , STGM 269] MGMT 370 - Quality/Operations Management [sephemote state] Cultural Enrichment (see note 4) * PGMG 341 - Advanced TeachingfrexMc340]	4 m m m d
<u>Summer Semester</u> * BIOL 114 - Biology & Maintenance of Turfgrass	4	Tcaching Seminar & Tests	<u>n</u>
ISYS 321 - Business Information Systems (ACCT 202, MR DT2), MRAIT 204	5	FIFTH YEAR Fall Semester	
EIVEL 323 - AOV BUS WITHING FROM 211 00 200 Contents * PGMG 340 - Fundamentals of Golf Instruction parts 231		* MGMT 373 - Human Resource Management [arphenoic status] * RFIM 204 - Food and Beverage Operations MKTG 441 - International Machanics	
MKTG 322 - Consumer Behavior [NKTG J21, PSVC 198]	e.	BUSN 499 - Intertational Marketing (MKTG 131, 450% 1214) BUSN 499 - Interdisciplinary Integrating Experience (ENC022, MEMT 370, MKTG 321, & serier stand)	
	15	MKTG 476 - Marketing Strategy INKTG 222. ECON 221	<u>ب</u>
* Must take in semester designated 128 CREDIT HOURS ARE REQUIRED FOR GRADUATION	<u>UATION</u>	Senior Seminar/Career Enhancement	G
CRADUATION REQUIREMENTS: A cumulative grade point average of 2, course work taken in the major; (3) All course work taken in the business core.	ade point average of 2.00 or in in the business core.	CRADUATION REQUIREMENTS: A cumulative grade point average of 2.00 or better in each of the following categories: (1) All course work taken; (2) All course work taken in the major; (3) All course work taken in the business core.	en; (2) All
PLEASE NOTE: STUDENTS WHO RETURN TO THE UNIVER REQUIREMIENTS OF THE CURRICULUM WHICH ARE IN F <u>ORIGINALLY</u> ADMITTED.	KSITY AFTER AN INTERRUP ORCE AT THE TIME OF THEI	PLEASE NOTE: STUDENTS WHO RETURN TO THE UNIVERSITY AFTER AN INTERRUPTED ENROLLMENT (NOT INCLUDING SUMMER SEMESTER) MUST MEET THE REQUIREMENTS OF THE CURRICULUM WHICH ARE IN FORCE AT THE OF THEIR RETURN, <u>NOT</u> THE REQUIREMENTS IN EFFECT WHEN THEY WERE <u>ORIGINALLY</u> ADMITTED.	MEET THE RE
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PGA ID	Katke #	Starting Date	
Bachelor of Science in Business	- PGA Golf Management - FERRIS S	TATE UNIVERSITY "Form	
FIRST YEAR		SECOND VFAR	
Fall Semester		Fall Semester	
* PGMG 101 - Orientation to PGM (Qualifying Test) ENGT 150 Equation 1	6	ENGL 211/250 - (choose one) [ENGL 150 C. or better]	3
PSYC 150 - Introduction to Psychology	- - -	Cultural Enrichment(see note 4) ECON 222 - Economics 2 recoving	, , ,
COMM 121 - Fund. of Public Speaking MATH 115 (see mote 3)	5 6 6	ACCT 201 - Accounting 1 [MATH 110 C. or helico] MKTG 321 - Principles of Marketing [sophomore status]	
Spring Semester * PGMG 201 - PGA Level 1 Study I PGMG 201	6	Spring Semester ACCT 202 - Accounting 2 (ACCT 201 C- or bener) AIMC300 - Principles of Advertisinger-	
Scientific Understanding Elective Cultural Enrichment	3/4	MGMT 301 - Applied Management	
ECON 221 - Economics (MATH 110 or proficiency) MKTG 231 - Professional Selling (COMM 121)	3 3 3 9 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	RETG 337 - Principles of Retailing Interesting	14
Summer Semester PGMG 192 - Internship 1 posid 201 C or bener, see note 5]	2	Summer Semester PGMG 292 - Internship 2 (PGMG 202 C or bener, see note 5)	0
NOTES * Must take in semester designated 1. Check if Playing Ability Test (PAT) is passed a			
 Prerequisites shown in brackets [] Ilso ar General Education Electric from hear 21 and the ACT and	as ACT cross		

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4. You must take three (3) cultural enrichment courses. Select three (3) courses from the cultural enrichment subject areas, including one at the 200 level or above. Consult: http://www.ferris.edu/htmls/academics/gened/cultcourses.html

5. You must register for internships (PGMG 192, 292, 392, 492, and 493) in the semester they are taken. You must have a Cum. GPA of 2.00 or better.

B.S. BUSINESS - PGA GOLF MANAGEMENT - FERRIS STATE UNIVERSITY	AR FOURTH YEAR Er Fall Semester - Internship 3 (see mote 3) 2 PGMG 492 - Internship 4 (see more 5) 2	Spring Semester Spring Semester BLAW 321 - Contracts and Sales 3 FINC 322 - Financial Management 3 ACCT_SELAWING 3 FINC 322 - Financial Management 3 ACCT_SELAWING 3 STQM 260 - Intro to Statistics/MATH ILS C- w Letter) 3 * MGMT 310 - Small Business Management 3 * MGMT 310 - Small Business Management 3 * RETG 339 - Retail Merchandising (RETG 321) 4 * RETG 339 - Retail Merchandising (RETG 321) 4 * RETG 339 - Retail Merchandising (RETG 321) 5 * RETG 339 - Retail Merchandising (RETG 321) 4 * REMG 341 - Advanced Teaching (Noterations Management (soothores states) 3 * PGMG 341 - Advanced Teaching (Noterations dates) 3	Summer Semester * Teaching Seminar & Tests 15 * BIOL 114 - Biology & Maintenance of Turfgrass 4 FIFTH YEAR 15 * BIOL 114 - Biology & Maintenance of Turfgrass 4 FifTH YEAR 15 * SYS 321 - Business Information Systems 3 FIFTH YEAR 15 ACCT222 NKT0 321 - Business Information Systems 3 FIFTH YEAR 15 ACCT222 NKT0 321 - Business Information Systems 3 FIFTH YEAR 15 ACCT222 NKT0 321 - Business Information Systems 3 5 15 ACCT222 NKT0 321 - Business Information Systems 3 3 3 ACCT222 NKT0 321 - Constumer Behavior 3 5 MKTG 441 - International Marketing (NKTG 32 - Constumer Behavior 3 MKTG 322 - Constumer Behavior 3 MKTG 441 - International Marketing (NKTG 32 - seme natural BUS A99 - Interdisciplinary Integrating Experience 3 MKTG 322 - Constumer Behavior 3 15 MKTG 476 - Marketing Strategy (NKTG 32 - ROW 231, KEON 231,	IRED FOR GRADUATION S: A cumulative grade point average of 2.00 or b Il course work taken in the business core. RN TO THE UNIVERSITY AFTER AN INTERRUPTI
	THIRD YEAR <u>Fall Semester</u> PGMG 392 - Internship 3 (see note s)	Spring Semester BLAW 321 - Contracts and Sales FINC 322 - Financial Management face faction and the faction of the faction of the faction of the factor of t	Summer Semester * BIOL 114 - Biology & Maintenance of ISYS 321 - Business Information Systems ACCT 292, NKT0 22, MGART Nat ENGL 325 * Adv Bus Writing (ENGL 21 or 200 ENGL 325 * Adv Bus Writing (ENGL 21 or 200 * PGMG 340 - Fundamentals of Golf In (NKTG 322 - Consumer Behavior (NKTG 322 - Consumer Behavior (NKTG 322 - Consumer Behavior	* Must take in semester designated <u>128 CREDIT HOURS ARE REOU</u> <u>GRADUATION REQUIREMENT</u> course work taken in the major; (3) A PLEASE NOTE: STUDENTS WHO RETU REQUIREMENTS OF THE CURRICULUI

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PROPOSAL SUMMARY AND ROUTING FORM

Proposal Title: Close Theatre Minor

NO K

Initiating Individual: <u>Trinidy Williams</u> Initiating Department or Unit: <u>Humanities</u> Contact Person's Name: <u>Trinidy Williams</u> e-mail: <u>willi233@ferris.edu</u> phone: <u>X3675</u>

- Group I A New degree, major, concentration, minor, or redirection of a current offering
- Group I B Deletion of a degree, major, concentration, or minor
- Group II A New Course, modification of a course, deletion of a course
- Group II B Minor curriculum clean-up
- □ Group III Certificates (□ College Credit □ Non-Credit) □ New Certificate
- Group IV Other Site Locations (C College Credit Non-Credit)

	Signature Print and sign your name.	Date	Vote/Action * Number count **
Program Representative **	TRINIDY WILLIAMS	1 23/15	Support Support with Concerns Not Support Abstain
Department/School/Faculty Representative Vote **	John Scott Gray	2-2-15	<u>C</u> Support Support with Concerns Not Support Abstain
Department/School Administrator	TRINIDY WILLIAMS	2/2/15	Support Support with Concerns Not Support
College Curriculum Committee/Faculty	John Scott Gray	2-26-15	Support Support with Concerns Not Support Abstain
Dean	J. Andy Kaitata	3/3/15	_ <u>X</u> Support Support with Concerns Not Support
University Curriculum Committee **	BE PZ	3/23/15	_ /_Support (<i>G</i> − <i>O</i>) Support with Concerns Not Support Abstain
Senate **		()	Support Support with Concerns Not Support Abstain
Academic Affairs			Support Hold Not Support

* Support with Concerns or Not Support <u>must</u> include identification of specific concerns with appropriate rationale. ** Number count <u>must</u> be given for all members present and/or voting.

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To be completed by Academic Affairs		Date/Term of Implementation:	
President (Date Approved)	Board of Trustee	s (Date Approved)	Academic Officers of MI (Date Approved)

Revised September 2014

1. Proposal Summary

(Summary is generally less than one page. Briefly: state what is proposed with a summary of rationale and highlights.)

The Theatre Minor (THAR) was to undergo the APR process during the 2013-2014 academic year. A review of the number of declared minors indicated continual decline. In addition, the required upperlevel courses do not attract enough students to continue offering. There are 2 students currently enrolled as a Theatre Minor. One has completed course work & the other is currently enrolled in the one remaining course required for minor completion. Due to low numbers of minors & low enrollment in upper-level Theatre courses we are closing the Theatre Minor.

2. Summary of Curricular Action (check all that apply to this proposal)

Degree Major Minor Concentration Certificate Course

□ New □ Modification ⊠ Deletion

Name of Degree, Major, etc. : _Theatre Minor_(THAR)_____

3. Summary of All Course Action Required Contact Senate Secretary or UCC Chair if additional spaces are required.

- a. Newly Created Courses to be Added to FSU Catalog: Prefix Number Title
- b. Courses to be Deleted from FSU Catalog:

Prefix	Number	Title
THTR	220	Scene Painting
THTR	225	Stage Make-Up
THTR	319	Stage Management
THTR	350	Lighting Design

- c. Existing Course(s) to be Modified: Prefix Number Title
- d. Addition of existing FSU courses to program Prefix Number Title

e. Removal of existing FSU courses from program Prefix Number Title

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4.	Summary of All Consult	ations					
	Form Sent (B or C)	Date Sent	Responding Dept.	Date Received & by Whom			
	Form B	1/23/15	School of Education	1/23/15 Jim Powell			
5.	5. Will External Accreditation be sought? (For new programs or certificates only)						
	🗌 Yes 🗌 No)					
	If yes, name the organization involved with accreditation for this program.						
6.	Is a PCAF required?	Yes	No Is the PCAF appro	oved? YesNo			
	(If yes, supply link from	Academic Af	fairs website where PCAF is	posted.			
7.	7. Program Checksheets affected by this proposal (check all that apply to this proposal)						
	Add Course Delete Course Modify Course Change Prerequisite Move from required to elective Nove from elective to required Change Outcomes and Assessment Plan Change credit hours						
8.	B. List all Checksheets affected by this proposal:						

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8. List all Checksheets affected b College Department Program

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CAS, Humanities Department, Theatre Minor

To be completed by each department affected by the proposed change, addition, or deletion. Potential duplication of coursework is reason for consultation.

1. This completed form must be forwarded with the proposal to the administrator of the department to be consulted.

2. The department must respond within 10 business days of receipt of this form to insure inclusion in the final proposal. The completed original is returned to the Academic Senate office to be inserted into the proposal and a copy is returned to the initiator.

The department must acknowledge receipt of this form and the proposal in writing to the initiator.

Failure to respond by 10 business days of receipt of this form is interpreted as support for the proposal.

3. The Proposing Department must address any concerns raised by the consulted department. This response must be in writing and will be included in the proposal following the original consultation form.

RE: Proposal Title Close Theatre Minor_____

Initiator(s): <u>Trinidy Williams</u>
Proposal Contact: Trinidy Williams Date Sent: 1/23/15
Department: Humanities Campus Address: <u>JOH 119</u> (Please type)

Responding Department: School of Ed	cation
Administrator: Jim Powell	Date Received: <u>1/23/15</u> Date Returned:

Based upon department faculty review on _____(date), we



Support the above proposal with the modifications and concerns listed below.

Support the above proposal.
 Support the above proposal with the modifications and co
 Do not support the proposal for the reasons listed below.

Comment regarding the impact this proposal has on current curriculum including prerequisites, scheduling, room assignments, and/or faculty load for your department. Use additional pages, if necessary.

Course Data Entry Form

FORM F Rev. September 2012

I. ACTION TO BE TAKEN: DELETE COURSE FROM CATALOG.

The course listed below will be removed from the Ferris State University Catalog. (See Appendix E Instructions for Completing Forms.)

- a. Desired Term Effective: Fall Year: 2015
- II. CURRENT COURSE TO BE DELETED FROM CATALOG:

a. Course Prefix: THTR	b. Number: 220	c. Enter Contact H	lours per week ir	i boxes.		
		LECture: 1	LAB: 2	Seminar		
d. INDependent Study	Practicu	ım: [C	Check (x) box as	appropriate.	See definitions in Appendix	E.)

e. Full Course Title: Scene Painting

Date Completed:

Date Rec'd:

UCC Chair Signature/Date:	Academic Affairs Approval Signature/Date:
ale and 3 BSIIS	<u> </u>
	Office of the Registrar use ONLY

Entered: SCACRSE __ SCADETL __SCARRES __ SCAPREQ

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Course Data Entry Form

I. ACTION TO BE TAKEN: DELETE COURSE FROM CATALOG.

The course listed below will be removed from the Ferris State University Catalog. (See Appendix E Instructions for Completing Forms.)

a. Desired Term Effective: Fail Year: 2015

II. CURRENT COURSE TO BE DELETED FROM CATALOG:

- a. Course Prelix: THTR b. Number: 225 c. Enter Contact Hours per week in boxes. LECture LAB: 2 Seminar
- d. INDependent Study Practicum: [Check (x) box as appropriate. See definitions in Appendix E.)

e. Full Course Title: Stage Make-up

UCC Chair Sig	inature/Date:		Ac	ademic Affair:	rs Approval Signature/Date:
CC .	P2 3	123/15			1_1
		c)ffice of the I	Registrar use	e ONLY
Date Rec'd:	Date Completed:	Entered: SCACRSE	SCADETL	SCARRES	SCAPREQ

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Course Data Entry Form

I. ACTION TO BE TAKEN: DELETE COURSE FROM CATALOG.

The course listed below will be removed from the Ferris State University Catalog. (See Appendix E Instructions for Completing Forms.)

a. Desired Term Effective: Fall Year: 2015

II. CURRENT COURSE TO BE DELETED FROM CATALOG:

- a. Course Prefix: THTR b. Number 319 c. Enter Contact Hours per week in boxes.
- LECture: 1
 LAB: 2
 Seminar

 d. INDependent Study
 Practicum:
 [Check (x) box as appropriate. See definitions in Appendix E.)

e. Full Course Title: Stage Management

Date Completed:

Date Rec'd:

UCC Chair Signature/Date:	Academic Affairs Approval Signature/Date:
Ce For 3 BIS	<i>i</i>
	Office of the Registrar use ONLY

Entered: SCACRSE __ SCADETL __SCARRES __ SCAPREQ

Υ. $\frac{1}{2} = \frac{1}{2} \left(\frac{1}{2} - \frac{1}{2} \right)$

Course Data Entry Form

I. ACTION TO BE TAKEN: DELETE COURSE FROM CATALOG.

The course listed below will be removed from the Ferris State University Catalog. (See Appendix E Instructions for Completing Forms.)

Year: 2015 a. Desired Term Effective: Term Fall

II. CURRENT COURSE TO BE DELETED FROM CATALOG:

- b. Number 350 c. Enter Contact Hours per week in boxes. a. Course Prefix: THTR
- LECture: 2 LAB: 2 Seminar Practicum:
- [Check (x) box as appropriate. See definitions in Appendix E.) d. INDependent Study

e. Full Course Title: Lighting Design

UCC Chair Signature/Date:	Academic Affairs Approval Signature/Date:
Qe F-2-318115	
	Office of the Registrar use ONLY
Date Rec'd:Date Completed: Entered: SC	CACRSE SCADETLSCARRES SCAPREQ

To be completed by each department affected by the proposed change, addition, or deletion. Potential duplication of coursework is reason for consultation.

- 1. This completed form must be forwarded with the proposal to the administrator of the department to be consulted.
- The department must respond within 10 business days of receipt of this form to insure inclusion in the final proposal. The completed original is returned to the Academic Senate office to be inserted into the proposal and a copy is returned to the initiator.

The department must acknowledge receipt of this form and the proposal in writing to the initiator.

Failure to respond by 10 business days of receipt of this form is interpreted as support for the proposal.

3. The Proposing Department must address any concerns raised by the consulted department. This response must be in writing and will be included in the proposal following the original consultation form.

RE: Proposal Title Close Theatre Minor____

Initiator(s): <u>Trinidy WIIIiams</u>
Proposal Contact: Trinidy Williams Date Sent: 1/23/15
Department: Humanities Campus Address: <u>JOH 119</u> (Please type)

Responding Department: <u>School of Education</u>
Administrator: <u>Jim Powell</u> Date Received: <u>1/23/15</u> Date Returned:
Based upon department faculty review on $\frac{1/28}{16}$ we
Support the above proposal. 10 - 0 Support the above proposal with the modifications and concerns listed below. Do not support the proposal for the reasons listed below.

Comment regarding the impact this proposal has on current curriculum including prerequisites, scheduling, room assignments, and/or faculty load for your department. Use additional pages, if necessary.

Paula L Hadley-Kennedy

From:	Olukemi O Fadayomi
Sent:	Tuesday, March 24, 2015 2:05 PM
То:	Trinidy D Williams
Cc:	Adnan Dakkuri; Brian Holton; David M Marion; Elise M Gramza; John Scott S Gray; Kristy L Motz; Mark A Hutchinson; Olukemi O Fadayomi; Paul Blake; Paula L Hadley-Kennedy; Tracey D Boncher; Victor I Piercey
Subject:	Proposal #15-063

Your proposal to close Theatre Minor, #15-063 was approved by UCC on Monday, March 2 and has been forwarded to Academic Affairs. Congratulations!

Kemi Olukemi Fadayomi, Ph. D Professor Department of Biological Sciences Ferris State University ASC 2009, 820 Campus Drive Big Rapids, MI 49307-2225

fadayok@ferris.edu Phone: (231) 591-5628 Fax: (231) 591-2540

PROPOSAL SUMMARY AND ROUTING FORM

#15-058

IAN 1 5 2015

Revised September 2014

FORM A

Proposal Title: <u>New Degree Program: B.S. in Industrial Chemistry (2</u> <u>concentrations)</u>

Initiating Individual: <u>Mark Thomson</u> Contact Person's Name: <u>Mark Thomson</u> e-mail: <u>thomsom@ferris.edu</u> phone: <u>Ext 5895</u>

- Group I A New degree, major, concentration, minor, or redirection of a current offering
- Group I B Deletion of a degree, major, concentration, or minor
- Group II A New Course, modification of a course, deletion of a course
- Group II B Minor curriculum clean-up
- Group III Certificates (C College Credit Non-Credit) New Certificate
- Group IV Other Site Locations (C College Credit Non-Credit)

	Signature Print and sign your name.	Date	Vote/Action * Number count **
Program Representative **	Mark Thomson auch	11/21/14	Support Support with Concerns Not Support Abstain
Department/School/Faculty Representative Vote ** David Frank	Carl Vich David Frank	11/26/14	7 Support 0 Support with Concerns 0 Not Support Abstain Abstain
Department/School Administrator	Dail Frank	1/24/14	Support Support with Concerns Not Support
College Curriculum Committee/Faculty	John Sost Gray	2-5-15	Support Support with Concerns Not Support Abstain
Dean	July J. Andy Karafa	2/20/15	Support Support with Concerns Not Support
University Curriculum Committee **	CEP2	3/16/15	H Support _3 \$upport with Concerns Not Support Abstain
Senate **		, ,	Support Support with Concerns Not Support Abstain
Academic Affairs			Support Hold Not Support

* Support with Concerns or Not Support <u>must</u> include identification of specific concerns with appropriate rationale. ** Number count <u>must</u> be given for all members present and/or voting.

To be completed by Academic Affairs	Date/Term of Implementation:		
President (Date Approved) Board of Truste	es (Date Approved)	Academic Officers of MI (Date Approved)	

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• FORM E: CHEM 140 41 • FORM F: CHEM 140 43 • FORM E: CHEM 145 45 • FORM F: CHEM 145 47 • FORM F: CHEM 231 49 • FORM E: CHEM 231 49 • FORM E: CHEM 240 51 • FORM F: CHEM 240 53 • FORM F: CHEM 245 55 • FORM F: CHEM 245 55 • FORM F: CHEM 317 59 • FORM F: CHEM 317 61 • FORM E: CHEM 321 63 • FORM E: CHEM 322 65 • FORM F: CHEM 322 65 • FORM F: CHEM 322 67 • FORM F: CHEM 324 69 • FORM E: CHEM 342 71	0	FORM F: CHEM 122
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•	FORM E: CHEM 345	75
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9	FORM E: CHEM 381	81
٩	FORM F: CHEM 381	
٢	FORM E: CHEM 442	
8	FORM F: CHEM 442	
٩	FORM E: CHEM 451	89
9	FORM F: CHEM 451	.91
•	FORM E: CHEM 491	93
•	FORM F: CHEM 491	
٩	FORM E: PHYS 211	
8	FORM E: PHYS 212	

1. Proposal Summary

(Summary is generally less than one page. Briefly: state what is proposed with a summary of rationale and highlights.)

This is a proposal for a new BS program in Industrial Chemistry. The Physical Sciences Department in the College of Arts and Sciences has been home to an AAS degree program in Industrial Chemistry Technology with a long history of success. The decision to augment this by proposing a BS program has been informed by the recent APR study and report as well as feedback from the most recent meeting of the existing program advisory board and on-going interaction between program faculty and the American Chemical Society Committee on Technician Affairs (CTA).

The role of technicians in the industrial chemistry laboratory has broadened greatly in the last decade. CTA is currently considering a proposal to reconsider and redesign the employment guidelines from the American Chemical Society for chemical technicians. Applied Chemical Technical Professionals (ACTP) are being expected to play a much greater role in product and project development nationwide. As a result, content and coursework needed for adequate preparation have extended beyond what can be offered in a two year degree program, hence the need for a new BS degree.

The proposed degree will build on the acknowledged strengths and unique nature of the current AAS degree while remaining distinct from the existing BA Chemistry and BA Biochemistry degrees. The BA degrees will continue to provide excellent preparation for graduate and professional school. The proposed BS degree will focus instead on more industrial application, internships, and technician-level skill development.

The two selected concentrations are Manufacturing and Fermentation Science. The Manufacturing track will address the existing need within the state and region. This is particularly important in the short-term future as local chemical industries are currently in a state of economic recovery and growth. Pfizer in particular has expressed strong interest in returning to Ferris to hire graduates directly rather than working through temporary agencies and they are particularly interested in Bachelor level graduates with industrial chemistry skills and experience.

The Fermentation Science track will help develop a skilled work force for the rapidly growing fermentation industry in Michigan and throughout the Midwest. Currently there are no Bachelors level programs in Michigan in Fermentation Science and there are only five programs nationally. A relatively new Certificate Program in Fermentation Science and focusing solely on Beer will be offered at Central Michigan University starting in Fall 2015 requiring two lecture classes, two lab classes, and an internship. While the initial assumption might be that the fermentation industry growth is only in the production of alcoholic beverages such as beer and wine, there are other important industrial concerns that are making use of fermentation as a route to chemical synthesis of key chemical compounds. Recent shifts in the petroleum refining have reduced the availability certain polymer intermediates including several organic alcohols and acids. This, combined with increased global demand for these intermediates, has created an industrial environment where their production by fermentation is becoming financially viable and profitable. A recent article in Chemical & Engineering News on Biobased Polymers explains this change rather eloquently.

(<u>http://cen.acs.org/articles/92/i43/Biobased-Polymers.html</u>) Applications of this nature will be a major focus of the new coursework being developed in this Fermentation Science track.

In addition to the new major being proposed, this proposal will provide a necessary and desired clean-up of the Chemistry course offerings by establishing uniformity in pre-requisite requirements. The Physical Sciences Department and the Chemistry Program have determined that it is in the best interest of the students to require pre-requisite courses be passed with a minimum grade of C-. We have noted, with concern, that students completing part of a sequence of courses with a lesser grade are more likely to encounter greater difficulties in subsequent coursework. At the same time, several courses have co-requisites listed currently that are unnecessary. In the normal course of study, many students complete these "co-requisites" earlier in their studies and require unnecessary paperwork to override Banner system requirements.

2. Summary of Curricular Action (check all that apply to this proposal)

□ Degree ⊠ Major □ Minor ⊠ Concentration □ Certificate ⊠ Course

⊠ New ⊠ Modification □ Deletion

Name of Degree, Major, etc. <u>B.S. in Industrial Chemistry, Fermentation Science Concentration</u>, <u>Manufacturing Concentration</u>

3. Summary of All Course Action Required Contact Senate Secretary or UCC Chair if additional spaces are required.

a.	Newly Created Courses to be Added to FSU Catalog:		
	Prefix	Number	Title
	CHEM	342	Fermentation Chemistry
	CHEM	345	Chemical Manufacturing and Analysis II
	CHEM	442	Fermentation Analysis
	CHEM	491	Chemistry Internship

b. Courses to be Deleted from FSU Catalog: Prefix Number Title

c. Existing Course(s) to be Modified:

Existing Course(o) to be moundar.				
Prefix	Number	Title		
CHEM	122	General Chemistry 2		
CHEM	140	Orientation to Industrial Chemistry Technology		
CHEM	145	Safety and the Chemical Laboratory		
CHEM	240	Industrial Chemical Calculations		
CHEM	245	Chemical Manufacturing and Analysis		
CHEM	317	Instrumental Analysis		
CHEM	322	Organic Chemistry 2		
CHEM	381	Inorganic Chemistry		
CHEM	451	Introduction to Physical Chemistry		

d. Addition of existing FSU courses to program

Prefix	Number	Title
CHEM	121	General Chemistry 1
CHEM	122	General Chemistry 2
CHEM	140	Orientation to Industrial Chemistry Technology
CHEM	145	Safety and the Chemical Laboratory
CHEM	231	Quantitative analysis
CHEM	240	Industrial Chemical Calculations
CHEM	245	Chemical Manufacturing and Analysis
CHEM	317	Instrumental Analysis
CHEM	321	Organic Chemistry 1
CHEM	322	Organic Chemistry 2
CHEM	324	Fundamentals of Biochemistry
CHEM	364	Biochemistry
CHEM	381	Inorganic chemistry
CHEM	451	Introduction to Physical Chemistry
PHYS	211	Introductory Physics 1
PHYS	212	Introductory Physics 2
MATH	220	Analytical Geometry and Calculus I

MATH	251	Stats for Life Sciences
BIOL	121	General Biology 1
BIOL	122	General Biology 2
BIOL	218	Microbial Ecology
BIOL	286	General Microbiology
RFIM	111	Principles of Food Science
RFIM	113	Sanitation and Safety
RFIM	207	Beverage Management
ETEC	140	Engineering Graphics
CPSC	130	Programming – Problem Solving
PPET	100	Survey of Plastics and Elastomer Technology
PLTS	325	Plastics Technology for MET
PLTS	342	Plastics Material Select – PDET

e. Removal of existing FSU courses from program Prefix Number Title

4. Summary of All Consultations

Form Sent (B or C)	Date Sent	Responding Dept.	Date Received & by Whom
B B (Resent B (Resent B B	•	Biological Sciences Biological Sciences Mathematics Sports, Entertainment School of Design and	, and Hospitality Management Manufacturing
C (Resent	t) 1/14/15	FLITE	
FIN	12/16/14	Director of Financial A	lid

5. Will External Accreditation be sought? (For new programs or certificates only)

\square	Yes	\bowtie	No

If yes, name the organization involved with accreditation for this program.

6. Is a PCAF required? X Yes No Is the PCAF approved? X Yes

(If yes, supply link from Academic Affairs website where PCAF is posted.

7. Program Checksheets affected by this proposal (check all that apply to this proposal)

\boxtimes	Add Course 🗌 Delete Course 🔀	Modify Course 🔀 Change Prerequisite 📋 Move from required to ele	ective
	Move from elective to required \boxtimes	Change Outcomes and Assessment Plan 🔲 Change credit hours	

8. List all Checksheets affected by this proposal: College Department

Program

Arts & Sciences Arts & Sciences Physical Sciences Physical Sciences BS Industrial Chemistry – Fermentation Science BS Industrial Chemistry – Manufacturing

FORM A Addendum

In this Curriculum Proposal, FORM B and C Consultations were handled in a slightly different fashion and the following is offered by way of explanation.

Initial consultations were distributed to programs in Biology, Math, Plastics, Hospitality, and FLITE at the end of the Fall Semester in early December. The initial distributions were immediately followed up with significant conversations with department members in Biology, Plastics and Hospitality. These conversations, as well as conversations with the College Curriculum Committee, led to significant changes in the FORM D Checksheets for both tracks and the representation of the proposal in FORM A. The consultations with Math and FLITE were lost in transit during the end of the semester and the semester break.

After the semester break, this Curriculum Proposal in its current form was resubmitted to the Biology Department for consultation. This was done in part because of the strong reservations and lack of support given by the Biology Department to the original proposal. At the same time, consultations were resubmitted to Math and FLITE so as to gain from their voice in this process. All of the curriculum consultations have now been received and are included here in this proposal. Each consultation has contributed to this final document and their contributions are greatly appreciated.

To be completed by each department affected by the proposed change, addition, or deletion. Potential duplication of coursework is reason for consultation.

- 1. This completed form must be forwarded with the proposal to the administrator of the department to be consulted.
- 2. The department must respond within 10 business days of receipt of this form to insure inclusion in the final proposal. The completed original is returned to the Academic Senate office to be inserted into the proposal and a copy is returned to the initiator.

The department must acknowledge receipt of this form and the proposal in writing to the initiator.

Failure to respond by 10 business days of receipt of this form is interpreted as support for the proposal.

3. The Proposing Department must address any concerns raised by the consulted department. This response must be in writing and will be included in the proposal following the original consultation form.

RE: Proposal Title New Degree Program: B.S. in Industrial Chemistry (2 concentrations)

	Initiator(s): Mark Thomson	
	Proposal Contact: Mark Thomson Date Sent: 12/1/14	
	Department: <u>Physical Sciences</u> Campus Address: <u>ASC 3021</u> (Please type)	
\bigcirc		
	Responding Department: Biological Sciences	
	Administrator: Joe Lipar Date Received: 12/2/19 Date Returned: 12/12/14 Just 40	/
	Based upon department faculty review on (date), we	
	Support the above proposal. Support the above proposal with the modifications $\frac{1}{3}/4/6 \text{vote}:$	
	Support the above proposal. Support the above proposal with the modifications and concerns listed below. Do not support the proposal for the reasons listed below. Support reasons listed below.	ot
	Comment regarding the impact this proposal has on current curriculum including prerequisites, scheduling, room assignments, and/or faculty load for your department. Use additional pages, if necessary.	abs
	Email w/ concerns sent 12/12/14 from Herron to Thomso	~ 5
	David Frank.	

From:	Scott M Herron
To:	Mark A Thomson; David V Frank
Cc:	Scott M Herron
Subject:	FW: Industrial Chemistry Biology Consultation
Date:	Friday, December 12, 2014 2:29:06 PM

Dear Mark and David-

On behalf of the Curriculum Committee along with a few other departmental members, I have compiled the comments and concerns for the Industrial Chemistry proposal, specially focusing on the Fermentation Science concentration as it impacts Biology directly. In summary, the vote and comments are specific to the development of the proposal we have seen and are consulting on, not the merits of a Fermentation Science program within the Physical Sciences Department. I do feel there is support and collaboration waiting to happen to help shepherd the best possible proposal and concentration/degree in Fermentation Science. As the proposal stands now, our vote of CC +others was:

1/3/4/0 in the respective order: support/support with concerns/do not support/abstain.

When a revised proposal is ready to be consulted on, I will do my best to get votes from every faculty member eligible to vote. Timing and the concerns just did not lead to a complete vote at this point.

I will complete the consultation form so you have that for your records as well.

Fermentation science concentration

- 1) **Checksheet cleanup**. They have the prerequisites for BIOL 121 and 122 incorrect (remove CHEM 114 from both entries)
- 2) Learning outcomes. I see that two of the four learning outcomes for the fermentation science concentration (#2 and #3) relate to biology. This concentration only requires three BIOL courses. Should there be more BIOL courses in this concentration to fulfill the learning outcomes? This could be a great opportunity for upper-level team-taught courses between BIOL and CHEM faculty that would help fulfill the biology related course outcomes (see below).
- 3) Course prerequisites.
 - a. CHEM 342. The "Intro to Fermentation Science" course requires CHEM 364 but only BIOL 122. With a high-level chemistry prerequisite, should this perhaps be a "fermentation chemistry" course (and in fact that is the course title on the associated Form E and F)? If it is indeed "intro to fermentation science", should it either have a microbiology course as a prerequisite or a lower CHEM prerequisite?
 - b. CHEM 442. For a microbiology prerequisite in a product analysis course, would BIOL 286 be a better fit for the needs of fermentation science students (if indeed the students only take 3 biology courses)? I would like to get the input of all the microbiologists in our department on this issue!
- 4) **Courses in concentration.** This concentration (in fermentation science) only requires one fermentation science course. Is the name of the concentration aligned with the focus of the

concentration? It seems that adding more fermentation science courses would strengthen the program and more closely align the curriculum with its title and goals.

- 5) **Form E and F**. There are major errors on Form E and F for several of the courses specific to this concentration. For instance, in Form A-D, CHEM 342 is listed as "Into to Fermentation Science" and in Form E and F it is listed as "Fermentation Chemistry". The same issue arises for CHEM 442, as on Form A-D it is listed as "Fermentation Product Analysis" and on Form E and F it is listed as "Fermentation Analysis".
- 6) By requiring CHEM 364 as the prereq to the CHEM 342, it puts students back one or two semesters, and does not allow them to space out the fermentation science classes. Suggestion to use CHEM 322 in place of CHEM 364 as prereq, will allow them to take Intro to Fermentation Science and CHEM 451 sooner, and also spread out the classes. The imbalance of too much chemistry in the 2 & 3 year, followed by only 13 credits and 1 CHEM class for the 4 year makes no sense. This fact alone is likely to make this a 5 year, not 4 year degree, because most students will not succeed in year 2 and 3 of this proposed Fermentation Concentration.
- 7) The Department of Biology would like Dr. Thomson to work with the Biology Department to develop a more appropriate upper-level, biology based fermentation science class, taught or co-taught by biologists, that addresses the biological aspects of fermentation not addressed in BIOL 121, 122 and 218/286. This includes the cultural history, evolution and genetics of organisms involved in fermentation, and the ways humans have fermented plant products and other biologicals in the past and present.

The curriculum committee is concerned with the lack of alignment between the ICT degree and fermentation science focus of this concentration. Fermentation science programs at other schools may not require more BIOL courses or upper-level fermentation science courses than the one outlined in the current proposal; but upper-level fermentation science courses at these other schools often include a stronger biological basis, which seems to be missing from the current proposal. Perhaps the fermentation science curriculum should be submitted as its own separate program, not as a concentration under the ICT degree. This would allow the curriculum to be rearranged, (with perhaps deletion of some ICT courses) which would allow more room for the addition of fermentation science courses. This may require the reevaluation of faculty workloads, teaching responsibilities and the addition of new faculty members to the physical sciences department.

Another faculty member also mentioned the placement of fermentation science inside ICT as problematic. My vote, by the way, is support with concerns. I support the idea of the program but think that ICT is not the right place for it. We can work together to make this a stronger proposal (that is my opinion).

1) The proposal states "the proposed degree... (will remain) distinct from the existing BA chemistry and BS biochemistry degrees."

A side-by-side comparison of these three degrees would be very helpful to highlight how different the programs are.

2) The proposal asserts that the current AAS program in industrial chemistry has been successful. Some evidence of this success would strengthen the proposal. Employment data would be especially helpful, if available.

3) As I mentioned previously, the College of Engineering Technology should be part of this conversation as well, especially the plastics faculty. ***May I send this proposal to Marc Guske, an adjunct, full time faculty in the plastics department? I think he will have good insight into how well they can handle the addition of this program. From conversations with Marc it is my impression that the plastics department is already teaching a beyond-full capacity (though they of course can speak for themselves).

4) It is worth noting that central Michigan has a certificate program in fermentation science: <u>http://www.craftbrewingbusiness.com/business-marketing/central-michigan-start-</u> <u>fermentation-science-certification-program/</u>

5) For the fermentation science concentration, the second and third year look like they will be difficult for the students (especially the second year). Could one of these classes (like physics) be moved to the senior year, which only has 13 credits per semester? However, this has to be weighed against the risk of students failing physics and delaying their graduation.

6) It's my impression that both programs are ostensibly to train students to analyze and/or produce consumer products. Will the production of these products (beer, cheese, plastics, etc) be part of the curriculum?

7) Chem 317 has NMR as part of it's content. Does Ferris have an NMR? Will the liquid chromatography part of the course be done in collaboration with the new "core" facility, or is other equipment available?

Finally, fermentation science is a fast-growing industry, and I do think Ferris would benefit from a BS program. This is one of those rare fields where there is both demand and interest, and the proximity to "beer city" can only help matters.

From our microbiologists:

I think that BIOL286 or BIOL218 *could* fit... However, the *most appropriate* course would be "Food and Industrial Microbiology". I don't know if there would be enough demand to justify a new prep, though. As things stand right now, the addition of this course would basically add a Microbiology track to the Biology program. I'm not sure if that is where our department wants to go...

I think Biol 218 or Biol 286, at this point, could serve as an adequate prerequisite for an upper level microbiology class. I do like the name, "Food and Industrial Microbiology." If at all interested, I would be interested in helping to develop such a course, even though my area of expertise is more environmentally applied microbiology. There is a lot more to industrial fermentation than just yeast and magic. Both an introductory and an advanced microbiology courses would be quite appropriate for a fully prepared graduate to be an asset to a potential employer as well as to support future career mobility.

There is a wide variety of microbial considerations that are quite sophisticated ranging from controlling fermentation to achieve specific end products and prevention/treatment of microbial contamination (infections) to genetic analysis and microbial "strain" modification using biotechnological techniques.

We would be willing to work with Mark to develop an appropriate course to support the revised program. We already have an Applied Fermentation class (Study Abroad), which is not appropriate for this Major, but something could be developed.

Manufacturing concentration

This concentration builds on the existing strength of the ICT AS and College of Engineering Technology.

The PCAF should address that fact that Engineering Technology does not currently have the faculty to be able to deliver this Concentration and it is our **recommendation that the PCAF** be modified to **request between .5 and 1.0 FTE of new faculty in Engineering** to support this new major in ICT Materials Science.

Best holiday wishes pulling together a revised proposal over a few fermented beverages and keep us in mind so we can work with you on this proposal Mark.

Sincerely,

Scott M. Herron Biology Curriculum Committee, Chair Department of Physical Sciences Response to Biological Sciences Consultation of 1/10/2015

We are appreciative of the support from the Department of Biological Sciences and the constructive nature of their responses to the proposal and look forward to their support and assistance in preparing and enacting this curriculum proposal.

Above all, we appreciate the offer of collaboration and welcome the development of new microbiology course(s) that would be appropriate for consideration and inclusion in this program. Whenever possible, we will be happy to provide input regarding what might be included in a course in Industrial Microbiology or any other similar new Biology offering.

For simplicity and organizational purposes, the comments and concerns of members of the Biology Department will be divided into four broad categories.

1. Simple Clean-up

Many of these points were also raised by the College Curriculum Committee.

Fermentation Checksheet has be edited to correctly reflect recent Biology pre-requisite changes.

Fermentation Checksheet Sample Sequence has been restructured to distribute the required courses more evenly. CHEM 451 remains the Capstone experience for both of these degree tracks. The senior year remains general education rich so that students wishing to complete some of that course work during summer semesters can complete the program earlier and reduce their anticipated debt load.

Course names for new proposed courses have been unified across forms (Checksheet, E, & F).

Course Plans and Course Outcomes in FORM Es have been added where missing, corrected where needed to reflect 15 weeks per semester, and reworded to better reflect expectations from the UCC Manual regarding word choice and measurability.

- 2. Clarification on the Nature of the Program
 - The Fermentation Science Concentration is placed within the BS in Industrial Chemistry with the view that fermentation is an important industrial process used in the synthetic preparation of economically important chemical compounds. This is NOT a proposal for a degree program about how to make beer or wine or spirits. The proposal summary in FORM A has been edited to better reflect this including reference to a recent article in Chemical & Engineering News reflecting the importance of fermentation in the chemical industry. Program outcomes have also been modified accordingly. The course plans for CHEM 342 and CHEM 442 have also been modified to better reflect this broad use of fermentation.
 - The current ICT program has a 55+ year history (predating the formation of the College of Arts and Sciences) with over 450 graduates, almost all remaining employed in the field throughout the Midwest. The coursework and skills it provides are considered valuable enough that many Chemistry BA and Biochemistry BA (and other majors as well) decide to pursue it during their junior or senior year as an enhancement to their existing degree track. It has been functioning for many years with adequate instrumental facilities within the Physical Sciences Department including an NMR, liquid and gas chromatography, and a GC-MS. While the program may benefit from the new "core" instrumental facility, the program has not been designed with those facilities in mind. It was our understanding that the "core" facility is more of a research resource than a coursework resource.
- 3. Collaboration with the Biology Department, especially with the Microbiologists
 - Collaboration and new course development was initially discussed with several members of the Biology Department during the development of this proposal during the past year. Response has been similar in form and substance to the statement in the consultation form, "...the addition of this course would basically add a Microbiology track to the Biology program. I'm not sure if that is where our department wants to go..." There are currently no additional courses in the Biology Department offerings that we felt were appropriate.
 - The Fermentation Science Concentration would benefit greatly from a course in Industrial Microbiology if one were available and we would be delighted to work with the Microbiology to discuss how such a course could be incorporated in to this curriculum. I expect the interest in this new program will be strong enough to merit such additional course development and will plan on a curriculum revision once that course is available.
- 4. Concerns with the Manufacturing Concentration

While we welcome the concerns raised on behalf of Plastics in the College of Engineering Technology, Plastics does not share those concerns. They have recommended two different courses that will accomplish many of the same objectives and the checksheet has been changed to reflect that change. As indicated by their FORM B consultation, they support this proposal without reservation.

FORM B Rev. September 2012

To be completed by each department affected by the proposed change, addition, or deletion. Potential duplication of coursework is reason for consultation.

- 1. This completed form must be forwarded with the proposal to the administrator of the department to be consulted.
- The department must respond within 10 business days of receipt of this form to insure inclusion in the final proposal. The completed original is returned to the Academic Senate office to be inserted into the proposal and a copy is returned to the initiator.

The department must acknowledge receipt of this form and the proposal in writing to the initiator.

Failure to respond by 10 business days of receipt of this form is interpreted as support for the proposal.

The Proposing Department must address any concerns raised by the consulted department. This response must be in writing and will be included in the proposal following the original consultation form.

RE: Proposal Title <u>New Degree Program: B.S. in Industrial Chemistry (2 concentrations)</u>

Initiator(s): <u>Mark Thomson</u>	
Proposal Contact: Mark Thomson	Date Sent: <u>1/13/15</u>
Department: <u>Physical Sciences</u> (Please type)	Campus Address: ASC 3021

Responding Department: Biology	
Administrator: Joe Lipar/Scott Herron Date Received: 413/15 Date Returned: 427/15	
Based upon department faculty review on, we	
Based upon department faculty review on, we Support the above proposal. Support the above proposal with the modifications and concerns listed below. Do not support the proposal for the reasons listed below. Comment regarding the impact this proposal has on current curriculum including prerequisites, scheduling, room assignments.	+
and/or faculty load for your department. Use additional pages, if necessary.	stain
See attached concerns	
See attached concerns & proposed modification to add acourse	

Scott M Herron

From: Sent: To: Cc: Subject: Attachments: Scott M Herron Tuesday, January 27, 2015 2:45 PM Mark A Thomson; Olukemi O Fadayomi Joseph Lipar; David V Frank; Scott M Herron Form B Consultation Biology Industrial Chemistry Form B Industrial Chemistry Biology January 2015.pdf

Hello-

The Biology Department has concluded its consultation on the Industrial Chemistry's January 2015 version. I have attached the Form B and have included the concerns in this email. Should you have any questions I will help clarify as needed.

My summary of the concerns is that some of the faculty feel strongly that an upper level microbiology class (in addition to the 200 level intro-general micro) is needed to be added to this program. As curriculum chair, it is my responsibility to acknowledge that the proposal initiator addressed these concerns in his response to department's previous Form B. In that response, he stated a willingness to work with the Biology Department to include an upper level Microbiology course that would become a required class in the Fermentation Science concentration. There is some interest from the microbiology Dr. Anne Spain to create such as course, such as Industrial and Environmental Microbiology. Should we initiate such a new class proposal, we will work with Mark Thomson to address the needs of the Fermentation Science concentration of this Industrial Chemistry program. In conclusion, we cannot and should not stop this proposal on moving forward, since the initiator is willing to work with us, and he is not in the position to create a microbiology class for the Biology Department.

Sincerely,

Scott M. Herron Biology Curriculum Committee, Chair

Concerns:

I do not support. I have a serious concern relating the need for an upper level microbiology course. It should be obvious that an understanding of the biological aspects of fermentation is essential to achieve a quality end product with minimal unwanted biological issues. Biological aspects of fermentation range from taste, color, aroma and "mouth-feel" of the desired product to shelf life, quality control, product consistency and microbial contamination. (A second do not support only responded, they agree with this concern).

I vote support with concerns. It seems as though this is meant to be a terminal degree so my concern is whether graduates will enough experience with (and knowledge of) microbes that might be involved in the fermentation process.

I support with concern: the fermentation concentration should have an upper division microbiology course in fermentation. (A second support with concerns responded, they agree with this concern).

My vote is support with concerns, which are below:

In the fermentation science form D, RFIM 111 appears in the required course list but not in the course sample sequence. Conversely RFIM 110 is in the sample sequence but not the required course list. The distribution of major and difficult classes through the course sequence is improved in both concentrations. However, the

1

second year of the manufacturing concentration still looks difficult. It might be beneficial to move physics to year four and replace it with cultural enrichment classes.

Form B Consultation Biology Industrial Chemistry

Scott M Herron

Tue 1/27/2015 2:45 PM

To:Mark A Thomson <MarkThomson@ferris.edu>; Olukemi O Fadayomi <OlukemiFadayomi@ferris.edu>;

Cc:Joseph Lipar <JosephLipar@ferris.edu>; David V Frank <DavidFrank@ferris.edu>; Scott M Herron <ScottHerron@ferris.edu>;

8 1 attachment

Form B Industrial Chemistry Biology January 2015.pdf;

Hello-

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Sincerely,

Scott M. Herron Biology Curriculum Committee, Chair

Concerns:

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I vote support with concerns. It seems as though this is meant to be a terminal degree so my concern is whether graduates will enough experience with (and knowledge of) microbes that might be involved in the fermentation process.

I support with concern: the fermentation concentration should have an upper division microbiology course in fermentation. (A second support with concerns responded, they agree with this concern).

My vote is support with concerns, which are below:

In the fermentation science form D, RFIM 111 appears in the required course list but not in the course sample sequence. Conversely RFIM 110 is in the sample sequence but not the required course list. The distribution of major and difficult classes through the course sequence is improved in both concentrations. However, the second year of the manufacturing concentration still looks difficult. It might be beneficial to move physics to year four and replace it with cultural enrichment classes.

Department of Physical Sciences Response to Biological Sciences Consultation of 1/27/2015

We appreciate of the second review from the Department of Biological Sciences and acknowledge that the majority of the responding members of the department now support the revised proposal.

After our first exchange of consultation forms, we made changes in our program to address several of the concerns that were raised. Most of the remaining concerns are about the possibility of an upper-level microbiology course in the fermentation concentration and the difficulty of the course load in the Manufacturing concentration.

We continue to think that this might be appropriate at a later time, and we are willing to explore such options once we see the directions that students intend to follow. The topic of fermentation has both a biological and a chemical background. This program is designed to emphasize the chemical side of fermentation—applications will not be limited to food and beverage, but will also include applications in the chemical industry, such as the production of precursors for polymers and other value-enhanced chemical intermediates.

We also note that the currently proposed sample schedule in the Manufacturing Concentration for the second year is nearly identical to the current AAS degree in Industrial Chemistry. This sequence has been successfully completed by hundreds of ICT students over the past 40 years and we do not anticipate that it will become a problem in the future.

Above all, we appreciate the offer of collaboration and welcome the development of new microbiology course(s) that would be appropriate for consideration and inclusion in this program. Whenever possible, we will be happy to provide input regarding what might be included in a course in Industrial Microbiology or any other similar new Biology offering.

FORM B Rev. September 2012

To be completed by each department affected by the proposed change, addition, or deletion. Potential duplication of coursework is reason for consultation.

- 1. This completed form must be forwarded with the proposal to the administrator of the department to be consulted.
- The department must respond within 10 business days of receipt of this form to insure inclusion in the final proposal. The completed original is returned to the Academic Senate office to be inserted into the proposal and a copy is returned to the initiator.

The department must acknowledge receipt of this form and the proposal in writing to the initiator.

Failure to respond by 10 business days of receipt of this form is interpreted as support for the proposal.

The Proposing Department must address any concerns raised by the consulted department. This response must be in writing and will be included in the proposal following the original consultation form.

RE: Proposal Title New Degree Program: B.S. in Industrial Chemistry (2. Initiator(s): Mark Thomson Proposal Contact: Mark Thomson Date Sent: 1/14/15 Department: Physical Sciences Campus Address: ASC 3021 (Please type)

Responding Department: <u>DEPARTMENT OF MATHEMATICS</u> Administrator: <u>JOSEPH KARAFA, ACTING DEPT. HEAD</u> Date Received: <u>115</u> Date Returned: <u>12.3/15</u>
Based upon department faculty review on 1/23)15 (date), we
Support the above proposal. Support the above proposal with the modifications and concerns listed below. Do not support the

proposal for the reasons listed below.

Comment regarding the impact this proposal has on current curriculum including prerequisites, scheduling, room assignments, and/or faculty load for your department. Use additional pages, if necessary,

To be completed by each department affected by the proposed change, addition, or deletion. Potential duplication of coursework is reason for consultation.

- 1. This completed form must be forwarded with the proposal to the administrator of the department to be consulted.
- 2. The department must respond within 10 business days of receipt of this form to insure inclusion in the final proposal. The completed original is returned to the Academic Senate office to be inserted into the proposal and a copy is returned to the initiator.

The department must acknowledge receipt of this form and the proposal in writing to the initiator.

Failure to respond by 10 business days of receipt of this form is interpreted as support for the proposal.

3. The Proposing Department must address any concerns raised by the consulted department. This response must be in writing and will be included in the proposal following the original consultation form.

RE: Proposal Title New Degree Program: B.S. in Industrial Chemistry (2 concentrations)

Respon	Responding Department: School of Design and Manufacturing			
Administ	rator: <u>Richard Goosen</u> Date Received: Date Returned: <u>12/3/14</u>			
Based u	pon department faculty review on <u>(d</u> ate), we			
	Support the above proposal. Support the above proposal with the modifications and concerns listed below. Do not support the			

Support the above proposal with the modifications and concerns listed below. Do not support the proposal for the reasons listed below.

Comment regarding the impact this proposal has on current curriculum including prerequisites, scheduling, room assignments, and/or faculty load for your department. Use additional pages, if necessary.

To be completed by each department affected by the proposed change, addition, or deletion. Potential duplication of coursework is reason for consultation.

- 1. This completed form must be forwarded with the proposal to the administrator of the department to be consulted.
- 2. The department must respond whin 10 business days of receipt of this form to insure inclusion in the final proposal. The completed original is returned to the Academic Senate office to be inserted into the proposal and a copy is returned to the initiator.

The department must acknowledge receipt of this form and the proposal in writing to the initiator.

Failure to respond by 10 business days of receipt of this form is interpreted as support for the proposal.

3. The Proposing Department must address any concerns raised by the consulted department. This response must be in writing and will be included in the proposal following the original consultation form.

RE: Proposal Title New Degree Program: B.S. in Industrial Chemistry (2 concentrations)

Initiator(s): <u>Mark Thomson</u>	<i>a</i>
Proposal Contact: Mark Thomson	Date Sent: <u>12/1/14</u>
Department: <u>Physical Sciences</u> (Please type)	Campus Address: <u>ASC 3021</u>

Responding Department: <u>Sp</u>	orts, Entertainment, and Hospitality N	<u>lanagement</u>	
Administrator: Julie Doyle	Date Received:	Date Returned:	

Based upon department faculty review on _____(date), we

Support the above proposal. Support the above proposal with the modifications and concerns listed below. Do not support the proposal for the reasons listed below.

Comment regarding the impact this proposal has on current curriculum including prerequisites, scheduling, room assignments, and/or faculty load for your department. Use additional pages, if necessary.

Student WILL RECEIVE DUPULATE Sanitation & Satety COURSEWORK as this is COVERED in REIMICS. . •

Department of Physical Sciences Response to SDM and SEHM Consultations of December, 2014

We are appreciative of the support from both Plastics and Hospitality and the constructive nature of their responses to the proposal and look forward to their support and assistance in preparing and enacting this curriculum proposal.

Inappropriate courses were removed from both FORM D Checksheets (Manufacturing – PPET 120, 223, 280 and PLTS 320; Fermentation – RFIM 204). In the case of the Fermentation Science Concentration, the eliminated course did not provide the needed depth and had considerable overlap with other courses in the curriculum. Additionally, the suggested course, RFIM 127, did not match well with the outcomes for this program so it was not added. In the case of the Manufacturing Concentration, "for majors" courses were removed and replaced with more appropriate courses that have been established for non-majors in other programs in CET.



Form C **Revised September 2012**

FLITE SERVICES CONSULTATION FORM

To be completed by the liaison librarian and approved by the Dean of FLITE. FLITE must return the original form to the Academic Senate office to be inserted in the proposal and a copy to the initiator. FLITE must respond within 10 business days of receipt of this form to insure that the form is included in the final proposal.

> Failure to respond by 10 business days of receipt of this form is interpreted as support for the proposal.

RE: Proposal Title: New Degree Program: B.S. in Industrial Chemistry (2 concentrations)

Projected number of students per year affected by proposed change:

Initiator(s): <u>Mark Thomson</u> Proposal Contact: <u>Mark Thomson</u>	Date Sent: 1/14/15
Department: <u>Physical Sciences</u> (Please type)	Campus Address: ASC 3021

Date Received: Dean of FUTE Signature: __Date Returned: Liaison Librarian Signature: -15-15 (date), FLITE concludes that: Based upon our review on

Library resources to support the proposed curriculum change are currently available.

- Library resources to support the proposed databases Additional Library resources are needed but can be obtained from current funds. Support, but significant additional Library funds/resources are required in the amount of s# 600.00 annually for ASBC Methods of Analysis X

Comment regarding the impact this proposal will have on library resources, collection development, or other FLITE programs. Use additional pages if necessary.

There are four reference type books that should be added to support the degree program plus an annual subscription to the appropriate methods of analysis publication.

FORM FIN

To be completed by the Director of Financial Aid (DFA). The DFA must return the original form to the Academic Senate Office to be inserted in the proposal and a copy to the initiator. The DFA must respond within 10 business days of receipt of this form to insure that the form is included in the final proposal.

Failure to respond by 10 business days of receipt of this form is interpreted as support for the proposal.

RE:	Proposal Title:	New Degree Program: B.S. in Industrial Chemistry (2 concentrations))
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Initiators: Mark Thomson			
Proposal Contact: <u>Mark Thomson</u>	Date Sent: <u>12/16/14</u>		
Department: Physical Sciences, College of Arts and Sciences	Campus Address: ASC 3021		
Director of Financial Aid Signature: The Development of Financial Aid Signature: Please check all that apply:	Date Returned:		
The new program is remedial as it prepares students for study at the postsecondary level. This program is not an eligible program per Federal requirements; therefore students in this program are not eligible to receive financial aid.			
The new program is considered a preparatory program as it prepares a stude criteria to be admitted into the program. <u>Student is only eligible for Federal</u>	nt for a given program, i.e., they do not meet the academic Direct Loans for one year.		
The new program is a certificate program. Certificate programs are not eligible programs per Federal requirements; therefore students in this program are not eligible to receive financial aid.			
The new program is a teacher certification program where it provides course employment as an elementary or secondary school teacher, but for which th are eligible for Federal Direct Loans only at an undergraduate level.	work required for a professional State credential necessary for e institution awards no academic credential. <u>Students</u>		
The new program is a teacher certification program that will award a certificate credential. Certificate programs are not eligible program per Federal requirements; therefore students in this program are not eligible to receive financial aid.			
The new program is a Bachelor Completion program; a two-year degree completion program that requires an associate degree or the successful completion of at least two years of college coursework as a prerequisite for admission. These are aid eligible programs and students may receive financial aid.			
The new program is a Master's, Professional, or Doctoral Degree/Major progracourses where some deficiency exists. Please note, students are eligible to courses will not be included in the total credit count to determine loan eligibili credits, Doctoral = 3 credits) in graduate level courses to receive Federal aid	receive Federal loans for the program, but undergraduate ity. Students must be half time (Graduate/Professional = 5		
The new program is an Associate's, Bachelor's, Master's, Professional, or De Federal requirements, these are aid eligible programs and students may rec	octoral Degree/Major and is conferred upon graduation. Per eive financial aid.		
Please include the number of credit hours to earn the degree or credential being sought. This is required as it must be reported to the Department of Education as well as the National Student Loan Clearinghouse, regardless if students are receiving federal aid.			

Credits Required to Earn Degree: Fermentation Science Concentration - 120 hours; Manufacturing Concentration - 120 hours Revised 4/30/14 sd

INDUSTRIAL CHEMISTRY MAJOR FERMENTATION SCIENCE CONCENTRATION BACHELOR OF SCIENCE

FERRIS STATE UNIVERSITY

MAJOR ADVISOR: Mark Thomson

Phone: (231) 591-2590

Campus Address: ASC 3007 E-mail: MarkThomson@ferris.edu

Admission requirements: First year student admission is open to high school graduates (or equivalent) who demonstrate appropriate academic preparedness, maturity and seriousness of purpose. High school courses and grade point average, ACT composite score, and ACT Mathematics and Reading sub scores will be considered in the admission and course placement process. Transfer students must have at least 12 credits at the time of application with a minimum of 2.0 overall GPA including an English and Math course or they will be considered as first year students.

Graduation Requirements:

- 1. Minimum 2.0 CUMULATIVE GPA in all courses.
- 2. No grade lower than a "C" in coursework required for the major
- 3. 120 minimum semester credits including general education requirements
- 4. Residency requirement: 30 minimum FSU credits
- 5. Minimum of 40 credits numbered 300 or higher
- Students may earn only one degree in Chemistry (either BA CHEM, BA BIOC or BS Industrial Chemistry)
 Number of 300+ Credits:

Courses required for students entering this major Fall Semester 2015

REQUIRED		COURSE TITLE SHOWN	FSU S.H.	GRADE	
Major:	Minimu	m 88 credits. No grade lower th	an "C" (2.0) allowed to apply toward t	his maje)r
CHEM	121	General Chemistry 1	(Prior Chemistry and MATH 115)	5	
CHEM	122	General Chemistry 2	(CHEM 121)	5	
CHEM	140	Orientation to Industrial Chemistry Technol	ogy	2	·
CHEM	145	Safety and the Chemical Laboratory	(CHEM 121)	2	
CHEM	231	Quantitative Analysis	(CHEM 122)	4	
CHEM	240	Industrial Chemical Calculations	(CHEM 122)	2	
CHEM	245	Chemical Manufacturing and Analysis	(CHEM 231 and CHEM 321)	4	
CHEM	317	Instrumental Analysis	(CHEM 231)	3	
CHEM	321	Organic Chemistry 1	(CHEM 122)	5	
CHEM	322	Organic Chemistry 2	(CHEM 321)	5	
CHEM	342	Fermentation Chemistry	(CHEM 364, BIOL 122)	4	
CHEM	364	Biochemistry	(CHEM 322)	4	
CHEM	442	Fermentation Analysis	(CHEM 317, BIOL 218 or 286)	4	
CHEM	451	Introduction to Physical Chemistry	(CHEM 322, PHYS 212 or 242, MATH 220)	4	
CHEM	491	Chemistry Internship	(CHEM 245, CHEM 317)	3	
PHYS	211	Introductory Physics 1	(MATH 116 or MATH 120 or by placement)	4	
PHYS	212	Introductory Physics 2	(PHYS 211)	4	
MATH	220	Analytical Geometry and Calculus 1	(MATH 126 or MATH 130 or by placement)	4	
BIOL	121	General Biology 1	(CHEM 121 concurrent)	4	
BIOL	122	General Biology 2	(BIOL 121 & CHEM 121)	4	· · · · · · · · · · · · · · · · · · ·
BIOL	218 or 286	Microbial Ecology General Microbiology	(BIOL 121) (CHEM 122)	3	
RFIM	111	Principles of Food Science		3	
RFIM	113	Sanitation and Safety		3	
RFIM	207	Beverage Management	·······	3	
ELECTI	VES: 2 cr		num of 120 credits required for this degree	-	
		300+ level coursework (if not taken in Cult	ural Enrichment or Social Awareness (Gen Ed))	2	
					1

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GENERAL EDUCATION REQUIREMENTS

Courses which qualify in the Scientific Understanding (Z), Cultural Enrichment (C) and Social Awareness (S) categories are delineated in the General Education section of the FSU electronic catalog:

http://www.ferris.edu/htmls/academie	cs/gened/courses.html
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ALCON.	/ IT IT IT IT IT OF I	ibied di fitti	academics/gened/courses.ntm	
I. GENERAL EDUCATION R	EQUIREN	MENTS	E. SOCIAL AWARENESS 9 Sem C	Credits 🔬
A. COMMUNICATION COMPETEN Course			Only approved "S" courses may count toward this cate Requirements: 1) two different subject areas including	at least
ENGL 150		3	one "foundations" course, 2) One course at the 200+ le	evel
ENGL 250		3	Course Grade	Credit
ENGL 311 or 321 or 323 or 325		3	Foundation	3
Choose one: COMM 105 or COMM 121		3	200+ level course (300+ level recommended)	3
	TOTAL		TOTAL	
This requirement is achieved in the pr C. QUANTITATIVE SKILLS This requirement is achieved in the pr D. CULTURAL ENRICHMENT	ogram maj 9 Sem C	or. redits	complete one course from the list of qualifying courses presented in the FSU catalog. This course may also co toward fulfilling the Cultural Enrichment or Social Aw requirement. Course:	unt
Only approved "C" courses may count to Requirements: 1) one course at the 200+1 credit hours of music and/or theater activ Course	evel, 2) max	timum 5	G. RACE/ETHNICITY/GENDER: Each student m complete one course from the list of qualifying courses presented in the FSU catalog. This course may also co	s iunt
200+ level course (300+ level recommended)	Giude	3	toward fulfilling the Cultural Enrichment or Social Aw	areness
		3	requirement.	
		3	Course:	
	TOTAL			

Sample Sequence: The following depicts a strategy to begin the program requirements. To complete this program in a four years, students must average 15 credit hours/semester. Students MUST consult their faculty advisor to develop a course sequence plan appropriate to their academic development and educational plans. FIRST YEAR

<u>r ir</u>	<u>ST ILAN</u>					
	Fall Semester		Spring Semester			
	ENGL 150 or COMM 105/121	3	ENGL 150 or COMM 105/121	3		
	CHEM 121	5	CHEM 122	5		
	BIOL 121	4	BIOL 122	4		
	CHEM 140	2	CHEM 145	2		
	FSUS 100 (Ferris State University Seminar)	1	Social Awareness	3		
	• • • •	15		17		
SEC	COND YEAR					
	Fall Semester		Spring Semester			
	CHEM 321	5	CHEM 322	5		
	CHEM 231	4	CHEM 245	4		
	CHEM 240	2	CHEM 317	3		
	ENGL 250	3	BIOL 218 or 286	3		
		14		$\frac{3}{15}$		
TH	IRD YEAR					
	Fall Semester		Spring Semester		Summer Semester	
	CHEM 364	4	CHEM 342	4	CHEM 491	3
	PHYS 211	4	PHYS 212	4		
	MATH 220	4	RFIM 111	3		
	Cultural Enrichment	3	Social Awareness	3		
		15		14		
Fou	rth YEAR					
	Fall Semester		Spring Semester			
	CHEM 442	4	CHEM 451	4		
	RFIM 207	3	RFIM 113	3		
	ENGL 311 or 321 or 323 or 325	3	Cultural Enrichment	3		
	Cultural Enrichment 300+	3	Social Awareness 300+			
		13		<u>3</u> 13		

WITHDRAWAL, RE-ADMISSION AND INTERRUPTION OF STUDIES

Students who return to the university after an interrupted enrollment (not including summer semester) must normally meet the requirements of the curriculum which are in effect at the time of their return, not the requirements which were in effect when they were originally admitted.

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Program Assessment Plan Fermentation Science Concentration

Program Learning Outcomes	Assessment Methods
1. Students should demonstrate a working knowledge of chemistry through problem solving, application, and critical evaluation of resources.	Course assignments and exams including ACS Exams with comparison to national averages. Capstone course evaluation and Internship supervisor surveys and reports.
2. Students should describe and explain the role of microorganisms in the production of industrially fermented products.	Course assignments and exams. Capstone course evaluation and Internship supervisor surveys and reports.
 Students should select and apply appropriate chemical and biological methods for identifying sources and causes of contamination in the fermentation process. 	Course assignments and exams. Capstone course evaluation and Internship supervisor surveys and reports.
 Students should effectively discuss and report technical information in a clear, concise, scientifically appropriate manner in a variety of formats. 	Course presentations, lab reports, and lab notebooks. Capstone course evaluation and Internship supervisor surveys and reports.
5. Students should establish a safe and healthy lab environment for the production of consumable food and beverage while applying the scientific method to the design, execution and interpretation of experiments and experimental data.	Lab reports and lab participation evaluations. Internship supervisor surveys and reports.
 Students should develop, manage, and broaden their network of professional contacts within the commercial chemical and fermentation communities. 	Annual advising interviews and reports. Exit interview reports and graduate surveys.

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INDUSTRIAL CHEMISTRY MAJOR MANUFACTURING CONCENTRATION BACHELOR OF SCIENCE

FERRIS STATE UNIVERSITY

MAJOR ADVISOR: Bill Killian

Phone: (231) 591-2590

Campus Address: SCI 307 E-mail: WilliamKillian@ferris.edu

Admission requirements: First year student admission is open to high school graduates (or equivalent) who demonstrate appropriate academic preparedness, maturity and seriousness of purpose. High school courses and grade point average, ACT composite score, and ACT Mathematics and Reading sub scores will be considered in the admission and course placement process. Transfer students must have at least 12 credits at the time of application with a minimum of 2.0 overall GPA including an English and Math course or they will be considered as first year students.

Graduation Requirements:

- 1. Minimum 2.0 CUMULATIVE GPA in all courses.
- 2. No grade lower than a "C" in coursework required for the major
- 3. 120 minimum semester credits including general education requirements
- 4. Residency requirement: 30 minimum FSU credits
- 5. Minimum of 40 credits numbered 300 or higher
- 6. Students may earn only one degree in Chemistry (either BA CHEM, BA BIOC or BS Industrial Chemistry) Number of 300+ Credits:

Courses required for students entering this major Fall Semester 2015

REQUIRED		COURSE TITLE - SHOWN IN	FSU S.H.	GRADE	
Major:	Minimu	m 79 credits. No grade lower that	n "C" (2.0) allowed to apply toward t	his majo	r · · · ·
CHEM	121	General Chemistry 1	(Prior Chemistry and MATH 115)	5	
CHEM	122	General Chemistry 2	(CHEM 121)	5	
CHEM	140	Orientation to Industrial Chemistry Technolog	sy l	2	
CHEM	145	Safety and the Chemical Laboratory	(CHEM 121)	2	
CHEM	231	Quantitative Analysis	(CHEM 122)	4	
CHEM	240	Industrial Chemical Calculations	(CHEM 122)	2	n.
CHEM	245	Chemical Manufacturing and Analysis	(CHEM 231 and CHEM 321)	4	
CHEM	317	Instrumental Analysis	(CHEM 231)	3	
CHEM	321	Organic Chemistry 1	(CHEM 122)	5	
CHEM	322	Organic Chemistry 2	(CHEM 321)	5	
CHEM	324	Fundamentals of Biochemistry	(CHEM 214 or CHEM 322)	3	
CHEM	345	Chemical Manufacturing and Analysis II	(CHEM 245 and CHEM 317)	4	
CHEM	381	Inorganic Chemistry	(CHEM 321)	3	
CHEM	451	Introduction to Physical Chemistry	(CHEM 322, PHYS 212 or 242, MATH 220)	4	
CHEM	491	Chemistry Internship	(CHEM 245, CHEM 317)	3	
PHYS	211	Introductory Physics 1	(MATH 116 or MATH 120 or by placement)	4	
PHYS	212	Introductory Physics 2	(PHYS 211)	4	
MATH	220	Analytical Geometry and Calculus 1	(MATH 126 or MATH 130 or by placement)	4	
MATH	251	Stats for Life Sciences	(MATH 130 or by placement)	3	
ETEC	C 140	Engineering Graphics	······	3	
or CPS		Programming – Problem Solving	(MATH 116 or MATH 120 or by placement)	4	
PPET	100	Survey of Plastics and Elastomer Technology		2	
PLTS	325	Plastics Technology for MET	······································	2	
PLTS	342	Plastic Material Select – PDET		3	
ELECTI	/ES: 10 -		inimum of 120 credits required for this degr		
		300+ level coursework (if not taken in Cultura	al Enrichment or Social Awareness (Gen Ed))	2	
	I.	ne waye d	····		

GENERAL EDUCATION REQUIREMENTS

Courses which qualify in the Scientific Understanding (Z), Cultural Enrichment (C) and Social Awareness (S) categories are delineated in the General Education section of the FSU electronic catalog:

htt	n://www	.ferris.edu	/htmls/a	cademics/s	gened/courses	.html
11.00		alei i ibieu u		caucinico/	geneur courses	

I CENEDAL EDUCATION D	FOUTER	10000
I. GENERAL EDUCATION R A. COMMUNICATION COMPETER		
Course	Grade	Credit
ENGL 150		3
ENGL 250		3
ENGL 311 or 321 or 323 or 325		3
Choose one: COMM 105 or COMM 121		3
	TOTAL	
B. SCIENTIFIC UNDERSTANDING	7 Sem	Credits
This requirement is achieved in the p	orogram majo	or.
C. QUANTITATIVE SKILLS		
This requirement is achieved in the p	orogram majo	or.
D. CULTURAL ENRICHMENT		
Only approved "C" courses may count to Requirements: 1) one course at the 200+ credit hours of music and/or theater acti	level, 2) maxi	imum 5
Course	Grade	Credit
200+ level course (300+ recommended)		3
		3
		3
	TOTAL	

E. SOCIAL AWARENESS	<u>9 Sem C</u>	
Only approved "S" courses may count tow Requirements: 1) two different subject are one "foundations" course, 2) One course a	as including	at least
Course	Grade	Credit
Foundation	•	3
200+ level course (300+ recommended)		3
		3
	TOTAL	
F. GLOBAL CONSCIOUSNESS: Eacl complete one course from the list of quali	h student mu fying course:	5
이 같이 잘 하는 것 같아. 이렇게 이렇게 이렇게 가지 않는 것 같이 많은 것 같아. 이렇게 하는 것 같아. 이렇게 하는 것 같이 많이	h student mu fying course: may also co	s ount
complete one course from the list of quali presented in the FSU catalog. This course toward fulfilling the Cultural Enrichment	h student mu fying course: may also co	s ount
complete one course from the list of quali presented in the FSU catalog. This course toward fulfilling the Cultural Enrichment requirement. Course: G. RACE/ETHNICITY/GENDER: Ea complete one course from the list of quali presented in the FSU catalog. This course toward fulfilling the Cultural Enrichment	h student mu fying courses may also co or Social Aw ch student m fying courses may also co	s punt /areness / nust s punt
complete one course from the list of quali presented in the FSU catalog. This course toward fulfilling the Cultural Enrichment requirement. Course: G. RACE/ETHNICITY/GENDER: Ea complete one course from the list of quali presented in the FSU catalog. This course	h student mu fying courses may also co or Social Aw ch student m fying courses may also co	s punt /areness / nust s punt

Sample Sequence: The following depicts a strategy to begin the program requirements. To complete this program in a four years, students must average 15 credit hours/semester. Students MUST consult their faculty advisor to develop a course sequence plan appropriate to their academic development and educational plans. FIRST YEAR

<u></u>	SITCAR					
	Fall Semester		Spring Semester			
	ENGL 150 or COMM 105/121	3	ENGL 150 or COMM 105/121	3		
	CHEM 121	5	CHEM 122	5		
	CHEM 140	2	CHEM 145	2		
	Social Awareness	3	MATH 220	2 4 14		
	FSUS 100 (Ferris State University Seminar)	1		14		
	· · · · · · · · · · · · · · · · · · ·	14				
SEC	COND YEAR					
	Fall Semester		Spring Semester			
	CHEM 321	5	CHEM 322	5		
	CHEM 231	4	CHEM 245	4		
	CHEM 240	2	CHEM 317	3		
	PHYS 211	$\frac{4}{15}$	PHYS 212	$\frac{4}{16}$		
		15		16		
		1.5				
TH	RD YEAR	15		10		
<u>THI</u>	<u>RD YEAR</u> <u>Fall Semester</u>	15	Spring Semester	10	Summer Semester	
<u>THI</u>		3	Spring Semester CHEM 381	3	Summer Semester CHEM 491	3
<u>THI</u>	Fall Semester	3 2				3
<u>THI</u>	Fall Semester CHEM 324	3 2 3	CHEM 381	3 4 3/4		3
<u>THI</u>	Fall Semester CHEM 324 PPET 100	3 2 3 3	CHEM 381 CHEM 345	3 4 3/4		3
<u>TH</u>	Fall Semester CHEM 324 PPET 100 MATH 251	3 2 3 3	CHEM 381 CHEM 345 ETEC 140 or CPSC 130	3 4 3/4		3
<u>THI</u>	Fall Semester CHEM 324 PPET 100 MATH 251 ENGL 250	3 2 3	CHEM 381 CHEM 345 ETEC 140 or CPSC 130 PLTS 325	3 4 3/4		3
	Fall Semester CHEM 324 PPET 100 MATH 251 ENGL 250	3 2 3 3	CHEM 381 CHEM 345 ETEC 140 or CPSC 130 PLTS 325	3 4		3
	Fall Semester CHEM 324 PPET 100 MATH 251 ENGL 250 Cultural Enrichment	3 2 3 3	CHEM 381 CHEM 345 ETEC 140 or CPSC 130 PLTS 325	3 4 3/4		3
	Fall Semester CHEM 324 PPET 100 MATH 251 ENGL 250 Cultural Enrichment	3 2 3 3	CHEM 381 CHEM 345 ETEC 140 or CPSC 130 PLTS 325 Social Awareness	3 4 3/4 2 <u>3</u> 15-16 3		3
	Fall Semester CHEM 324 PPET 100 MATH 251 ENGL 250 Cultural Enrichment rth YEAR Fall Semester	3 2 3 3 <u>3</u> 14	CHEM 381 CHEM 345 ETEC 140 or CPSC 130 PLTS 325 Social Awareness Spring Semester	3 4 3/4 2 <u>3</u> 15-16 3		3
	Fall SemesterCHEM 324PPET 100MATH 251ENGL 250Cultural Enrichmentrth YEARFall SemesterENGL 311 or 321 or 323 or 325	3 2 3 3 <u>3</u> 14 3	CHEM 381 CHEM 345 ETEC 140 or CPSC 130 PLTS 325 Social Awareness Spring Semester PLTS 342	3 4 3/4 2 <u>3</u> 15-16 3		3
	Fall SemesterCHEM 324PPET 100MATH 251ENGL 250Cultural Enrichmentrth YEARFall SemesterENGL 311 or 321 or 323 or 325Social Awareness 300+	3 2 3 3 <u>3</u> 14 3	CHEM 381 CHEM 345 ETEC 140 or CPSC 130 PLTS 325 Social Awareness Spring Semester PLTS 342 CHEM 451	3 4 3/4 2 <u>3</u> 15-16 3		3
	Fall Semester CHEM 324 PPET 100 MATH 251 ENGL 250 Cultural Enrichment rth YEAR Fall Semester ENGL 311 or 321 or 323 or 325 Social Awareness 300+ Cultural Enrichment	3 2 3 3 <u>3</u> 14 3 3 3 3	CHEM 381 CHEM 345 ETEC 140 or CPSC 130 PLTS 325 Social Awareness Spring Semester PLTS 342 CHEM 451 Cultural Enrichment 300+	3 4 3/4 2 <u>3</u> 15-16		3

WITHDRAWAL, RE-ADMISSION AND INTERRUPTION OF STUDIES

Students who return to the university after an interrupted enrollment (not including summer semester) must normally meet the requirements of the curriculum which are in effect at the time of their return, not the requirements which were in effect when they were originally admitted.

Program Assessment Plan Manufacturing Concentration

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Progra	um Learning Outcomes	Assessment Methods
1.		Course assignments and exams including ACS Exams with comparison to national averages. Capstone course evaluation and Internship supervisor surveys and reports.
2.	Students should operate in a safe, productive, and effective manner in chemistry and related labs, adapt to a variety of settings, and generate data using synthetic, wet, and instrumental techniques.	Lab reports and lab participation evaluations. Internship supervisor surveys and reports.
3.	Students should effectively report their own experimental results, present information from the literature, and be clear to their audience while using written, verbal, and electronic formats.	Course presentations, lab reports and lab notebooks. Capstone course evaluation and Internship supervisor surveys and reports.
4.	Students should ask informed questions and critically evaluate existing information in the chemical literature.	Course assignments and exams. Capstone course evaluation.
5.	Students should develop, manage, and broaden their network of professional contacts within the commercial chemical and fermentation communities.	Annual advising interviews and reports. Exit interview reports and graduate surveys.

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COURSE INFORMATION FORM

Complete all items below

Check all boxes where modifications are being made. Enter the modification to be made.

Course Identification

Prefix CHE	М
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Number 121

LEC 4 LAB 3 SEM .

Title General Chemistry 1

Credit Hours 5

Prerequisites MATH 115 with C- or better or ACT Math 24 or SAT 560 and CHEM 103 with C- or better or 1 year HS Chemistry Co-requisite None

Course Description: Fundamental principles, laws and theories of general chemistry, including stoichiometry, gas laws, thermochemistry, atomic structure, chemical bonding, periodicity, liquids and solids, solution chemistry, and theories of acids and bases. Concurrent laboratory-workshop sessions will include exercises illustrating the principles discussed in lecture. Students who anticipate enrolling in chemistry courses at the 200-level or higher should take this course. This course meets General Education requirements: Scientific Understanding, Lab.

Course Outcomes and Assessment Plan

Upon completion of this course, a student will:

- 1. Apply the scientific method to solve chemical problems, interpret chemical phenomena and propose reasonable explanations.
- 2. Calculate enthalpy changes of reactions using calorimetry data, standard enthalpies of formation, Hess's law, and bond energies.
- 3. Carry out unit and molar conversions in stoichiometric problems.
- 4. Explain the nature and properties of matter, including the types of attractions, from a macroscopic and atomic perspective.
- 5. Identify different types of chemical reactions and write various forms of balanced equations for reactions in aqueous solution.
- 6. Name and identify simple inorganic molecules and draw their overall geometry.
- 7. Use the periodic table to organize and correlate electronic structure, properties and reactivity of elements and compounds.

The outcomes for this chemistry course are assessed with a variety of methods including internal and external examinations, quizzes, presentations, laboratory notebooks, and/or laboratory reports.

Course Outline including Time Allocation

Basic Concepts of Chemistry	1 week
Atoms and elements	1 week
Molecules and Compounds	1 week
Introduction to Chemical Reactions	1 week
Stoichiometry	1 week
Thermochemistry	1 week
The Electronic Structure of Atoms	1 week
Chemical Bonds between Atoms	2 weeks
Gases and Gas Laws	1 week
Liquids and Solids	1 week
Solutions and Colloids	1 week
Ionic reactions in Solution	1 week
Acids, Bases, and Neutralization Reactions	1 week
Testing	1 week
-	

COURSE INFORMATION FORM

Complete all items below

Check all boxes where modifications are being made. Enter the modification to be made.

Course Identification

Prefix CHEM Number 1	122
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Title General Chemistry 2

Credit Hours 5

Prerequisites (Current) MATH 115 with C- or better or ACT Math 24 or SAT 560 and CHEM 121 with C- or better (Proposed) CHEM 121 with C- or better

LEC 4 LAB 3 SEM ____

Course Description: Continuation of CHEM 121, including oxidation-reduction reactions, electrochemistry, chemical equilibrium, chemical kinetics, nuclear chemistry, thermodynamics, and descriptive chemistry of metals and nonmetals. Laboratory will involve some experiments illustrating topics discussed in lecture along with several sessions devoted to the qualitative analysis of common cations and anions. Is a prerequisite for most 200-level or higher classes in chemistry. This course meets General Education requirements: Scientific Understanding, Lab.

Course Outcomes and Assessment Plan

Upon completion of this course, a student will:

- 1. Apply common theories of acids and bases to describe relevant species in acidic solutions, basic solutions and buffers.
- 2. Apply appropriate thermodynamic factors to determine the spontaneity of a process.
- 3. Apply theoretical models of reaction rates to the use of rate laws and the description of possible reaction mechanisms.
- 4. Describe at a molecular level what takes place when physical or chemical systems come to equilibrium, interpret diagrams or graphs representing such systems, and calculate concentrations of species in reactions that have come to equilibrium.
- 5. Identify common radioactive particles and describe their role in basic nuclear reactions.
- 6. Design and perform lab experiments and interpret data.
- 7. Integrate diverse concepts in chemical kinetics, redox reactions and electrochemistry, and the chemistry of the elements and apply them to new and unknown problems.

The outcomes for this chemistry course are assessed with a variety of methods including internal and external examinations, quizzes, presentations, laboratory notebooks, and/or laboratory reports.

Course Outline including Time Allocation Chemical Equilibrium Chemical Kinetics Oxidation-Reduction Reactions Electrochemistry Thermodynamics Nuclear Chemistry Descriptive Chemistry of Nonmetals Descriptive Chemistry of the Representative Metals Descriptive Chemistry of the Transition Metals Qualitative Analysis Testing	3 weeks 1.5 weeks 1 week 1 week 1.5 weeks 1.5 weeks 1.5 weeks 1 week 1 week 1 week 1 week
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FORM E Rev. May 2013

MODIEY A COURSE

MODIFY A COURSE Course Data Entry Form	FORM F Rev. September 2012	
1. ACTION TO BE TAKEN: MODIFY A COURSE		
Desired Term Effective (201508):		
II. COURSE TO BE MODIFIED:		
a. Course Prefix CHEM b. Number 122 c. Title General Chemistry 2		
LIST THE LETTER(S) OF ALL CHANGES FROM SECTION III BELOW. s See Appendix E Instructions for Completing Forms.		
III. MODIFICATIONS: Enter ONLY the modification(s) proposed.		
a. Course Prefix b. Number c. Contact Hours LECture LAB Seminar [Enter hours per week in box. See formula for contact hours to credit hours in Appendix E.]		
d. Practicum INDependent Study [Check (x) box as appropriate. See definitions in Appendix E.]		
e. Course Title: (Limit to 30 characters including punctuation and spaces.)		
f. College Code: g. Department Code: h. Credit Hours: Check (x) type 🗌 Variable 🔲 Fixed		
i. Enter number in box: Minimum Credit Hours j. Maximum Credit Hours		
k. May Be Repeated for Added Credit: Check (x) Yes No If yes, Max Times or Max Credits Awarded		
I. Levels: Check (x) 🗌 Undergraduate 🗋 Graduate 📄 Professional		
m. Grade Method: Check (x) 🛛 Normal Grading 🔲 Credit/No Credit (Pass/Fail)		
n. Does proposed new course replace an equivalent course? Check (x) 🛛 Yes 🔲 No		
o. Equivalent course: Prefix Number		
p. CATALOG DESCRIPTION – Limit to 125 words – PLEASE BE CONCISE.		
q. Term(s) Offered: r. Max Section Enrollment: Section(s) Affected:		
s. Prerequisites or Restrictions: CHEM 121 with C- or better		
t. Co-requisites:		
To be completed by Academic Affairs Office: - Standard & Measures Coding and General Education Code	an and an	
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Date Rec'd: Date Completed:Entered: SCACRSE SCADETL SCARRES SCAPRI	EQ	

COURSE INFORMATION FORM

Complete all items below

Check all boxes where modifications are being made. Enter the modification to be made.

Course Identification

Prefix

🔲 Number 140

LEC 2 LAB SEM (current)

Title Orient to Industrial Chem Tech

Credit Hours 2

CHEM

Prerequisites None

Co-requisite (Current) CHEM 121 (Proposed) None

Course Description: Overview of the chemical industry, including its development and practical applications of chemistry in an industrial setting. The role of the industrial chemist and/or technologist is discussed. Emphasis is also placed on use of the scientific literature available and the study of patents.

Course Outcomes and Assessment Plan

Upon completion of this course, a student will:

- 1. Demonstrate a working knowledge of the basic and fundamental concepts of general and organic chemistry.
- 2. Identify and use the available chemical literature.
- 3. Communicate effectively in a scientific context.
- 4. Identify the areas of current concern in industrial chemistry.
- 5. Explain the role of technicians in industrial chemistry.
- 6. Delineate the roles of basic research, engineering, and common sense in industrial chemistry.

The outcomes for this chemistry course are assessed with a variety of methods including internal and external examinations, quizzes, presentations, laboratory notebooks, and/or laboratory reports.

Use of chemical and related literature, including library1 weekStudy of patents1 weekStandard methods of analysis and property understanding1 weekAnalysis and economy of the chemical industry1.5 weekBasic inorganic chemistry processes2 weekFermentation processes1 weekOrganic processes1 weekChemical industry and the environment1 weekField trip and tests2 week	eek weeks eeks eek eek eek
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MODIFY A COURSE Course Data Entry Form	FORM F Rev. September 2012
I. ACTION TO BE TAKEN: MODIFY A COURSE	
Desired Term Effective (201508):	
II. COURSE TO BE MODIFIED:	
a. Course Prefix CHEM b. Number 140 c. Title Orient to Industrial Chem Tech	
LIST THE LETTER(S) OF ALL CHANGES FROM SECTION III BELOW. t See Appendix E Instructions for Completing Forms.	
III. MODIFICATIONS: Enter ONLY the modification(s) proposed.	
a. Course Prefix b. Number c. Contact Hours LECture LAB Seminar [Enter hours per week in box. See formula for contact hours to credit hours in Appendix E.]	
d. Practicum INDependent Study [Check (x) box as appropriate. See definitions in Appendix E.]	
e. Course Title: (Limit to 30 characters including punctuation and spaces.)	
f. College Code: g. Department Code: h. Credit Hours: Check (x) type 🔲 Variable 🔲 Fixed	
i. Enter number in box: Minimum Credit Hours j. Maximum Credit Hours	
k. May Be Repeated for Added Credit: Check (x) Yes No If yes, Max Times or Max Credits Awarded	
I. Levels: Check (x) 🔲 Undergraduate 🔲 Graduate 🔲 Professional	
m. Grade Method: Check (x) 🛛 🔲 Normal Grading 🔲 Credit/No Credit (Pass/Fail)	
n. Does proposed new course replace an equivalent course? Check (x) 🛛 Yes 🔲 No	
o. Equivalent course: Prefix Number	
p. CATALOG DESCRIPTION - Limit to 125 words - PLEASE BE CONCISE.	
q. Term(s) Offered: r. Max Section Enrollment: Section(s) Affected:	
s. Prerequisites or Restrictions:	
t. Co-requisites: None	
To be completed by Academic Affairs Office: - Standard & Measures Coding and General Education Code	
Basic Skill (BS) General Education (GE) Occupational Education (OC) G.E. Codes UCC Chair Signature/Date: Academic Affairs Approval Signature/Date: Academic Affairs Approval Signature/Date:	
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COURSE INFORMATION FORM

Complete all items below (Proposed).

Check all boxes where modifications are being made. Enter the modification to be made.

Course Identification

Number 145

LEC <u>2</u> LAB ____ SEM ____.

Title Safety – The Chemical Lab

Credit Hours 2

☑ Prerequisites Co-requisite None (Current) CHEM 121 (Proposed) CHEM 121 with a grade of C- or better

Course Description: Introduction to the chemical lab and the safety related responsibilities of the practicing chemist and/or technologist. Emphasis is placed on the safe handling and storage of hazardous materials, recognizing non-compatible materials, understanding and interpreting safety documents such as MSDS sheets, and in general becoming a safety conscious lab worker.

Course Outcomes and Assessment Plan

Upon completion of this course, a student will:

- 1. Recognize the large safety and health problems facing laboratories and the world.
- 2. Describe how to safely work with hazardous material, limit one's overall exposure to them, and correctly dispose of such materials.
- 3. Identify appropriate behavior in the chemical laboratory from a safety standpoint.
- 4. Judge from a safety standpoint what types of materials are compatible.

The outcomes for this chemistry course are assessed with a variety of methods including internal and external examinations, quizzes, presentations, laboratory notebooks, and/or laboratory reports.

Course Outline including Time Allocation	
Fire safety and general safety information	1.5 weeks
Labels importance. Understanding MSDS sheets and physical properties.	1.5 weeks
Handling compressed gases and liquids	1 week
Hazardous matter: safe use and safe disposal.	1.5 weeks
Non- compatible materials.	1 week
Potentially hazardous reactions	1 week
Toxicological level understanding/ exposure information.	1.5 weeks
Organic chemical hazards	1 week
Redox materials hazards	1 week
Radiation safety	1.5 weeks
Development and participation in a total safety program.	1 week
Test and Quizzes	1.5 weeks



MODIEV & COUDCE

MODIFY A COURSE Course Data Entry Form	FORM F Rev. September 2012
I. ACTION TO BE TAKEN: MODIFY A COURSE	
Desired Term Effective (201508):	
II. COURSE TO BE MODIFIED:	
a. Course Prefix CHEM b. Number 145 c. Tille Safety – The Chemical Lab	
IST THE LETTER(S) OF ALL CHANGES FROM SECTION III BELOW. s ee Appendix E Instructions for Completing Forms.	
III. MODIFICATIONS: Enter ONLY the modification(s) proposed.	
a. Course Prefix b. Number c. Contact Hours LECture LAB Seminar [Enter hours per week in box. See formula for contact hours to credit hours in Appendix E.]	
d. Practicum INDependent Study [Check (x) box as appropriate. See definitions in Appendix E.]	
e. Course Title: (Limit to 30 characters including punctuation and spaces.)	
f. College Code: g. Department Code: h. Credit Hours: Check (x) type 🗌 Variable 🗌 Fixed	
i. Enter number in box: Minimum Credit Hours j.Maximum Credit Hours	
k. May Be Repeated for Added Credit: Check (x) Yes No If yes, Max Times or Max Credits Awarded	
I. Levels: Check (x) 🔲 Undergraduate 🗋 Graduate 🔲 Professional	
m. Grade Method: Check (x) 🛛 🔲 Normal Grading 🔲 Credit/No Credit (Pass/Fail)	
n. Does proposed new course replace an equivalent course? Check (x) 🛛 🗌 Yes 🔲 No	
o. Equivalent course: Prefix Number	
p. CATALOG DESCRIPTION – Limit to 125 words – PLEASE BE CONCISE.	
q. Term(s) Offered: r. Max Section Enrollment: Section(s) Affected:	
s. Prerequisites or Restrictions: CHEM 121 with a grade of C- or better	
t. Co-requisites:	
To be completed by Academic Affairs Office: - Standard & Measures Coding and General Education Code Basic Skill (BS) General Education (GE) Occupational Education (OC) G.E. Codes	
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ate Rec'd: Date Completed:Entered: SCACRSE SCADETL SCARRES SCAPF	REQ

COURSE INFORMATION FORM

Complete all items below

Check all boxes where modifications are being made. Enter the modification to be made.

Course Identification

Prefix CHEM	Number 231	🗌 LEC <u>3</u> LAB <u>4</u> SEM <u>.</u> .
Title Quantitative A	nalysis	
Credit Hours 4	Prerequisites CHEM 122 with C- or better	Co-requisite None

Course Description: Introduction to classical quantitative and modern instrumental methods of analysis, including data handling, statistics, volumetric and gravimetric techniques, potentiometry, spectroscopy, and liquid chromatography. Concurrent laboratory includes the topics referred to above. This course meets General Education requirements: Scientific Understanding, Lab.

Course Outcomes and Assessment Plan

Upon completion of this course, a student will:

- 1. Interpret multiple equilibria existing in strong/weak/polyprotic acid (or base) solutions and predict pH in different concentrations.
- 2. Interpret multiple equilibria existing in chelating agent solutions and predict concentrations of different species under different conditions.
- 3. Explain the principle of extraction and extrapolate to qualitative/quantitative analysis by chromatography.
- 4. Compare and differentiate qualitative and quantitative aspects of matter-electromagnetic radiation interactions.
- 5. Organize statistical analysis of results from replicate trials and interpret the statistical data.

The outcomes for this chemistry course are assessed with a variety of methods including internal and external examinations, quizzes, presentations, laboratory notebooks, and/or laboratory reports.

Course Outline including Time Allocation	
Introduction to Chemical Analysis – an Overview	1 week
Laboratory Behavior of an Analyst	1 week
Statistical Approaches to Error in Analysis, Data Handling	1 week
Chemical Equilibrium: Concepts and Calculations	2 weeks
Acids, Bases, and Buffers: Concepts and Calculations	2 weeks
Gravimetric Analysis: The Limits of Solubility	1 week
Volumetric Analysis: Titrations and Equivalence Points	1 week
Introduction to Instrumentation	1 week
Potentiometry: Measuring pH	1 week
Molecular Spectroscopy: Analyzing with light (UV/Vis only)	2 weeks
Liquid Chromatography: Separate, Identify, Quantify, (HPLC Stressed)	2 weeks

COURSE INFORMATION FORM

Complete all items below

Check all boxes where modifications are being made. Enter the modification to be made.

Course Identification

	Prefix	CHEM
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Number 240

LEC 2 LAB SEM

Title Indust Chemical Calculations

Credit Hours 2

Prerequisites
 (Current) CHEM 122 with D- or better
 (Proposed) CHEM 122 with a C- or better

Co-requisite (Current) CHEM 140 and 321 (Proposed) None

Course Description: A review of the stoichiometric and weight relations in the chemical industry with an emphasis on problem solving. This course also covers statistical process control, as well as statistical techniques for evaluating experimental results. Scale-up problems and the use of industrial units are emphasized.

Course Outcomes and Assessment Plan

Upon completion of this course, a student will:

- 1. Solve basic chemical engineering and technological type problems.
- 2. Use units of measure not included in the traditional system.
- 3. Demonstrate basic chemical calculations used by industrial chemists including stoichiometry, concentration, and gas law problems.
- 4. Apply basic problem solving skills in unique situations.
- 5. Describe statistical process control and its place in industry.
- 6. Identify and calculate the basic statistical data traditionally relied upon in laboratory work.

The outcomes for this chemistry course are assessed with a variety of methods including internal and external examinations, quizzes, presentations, laboratory notebooks, and/or laboratory reports.

Course Outline including Time Allocation Basics. Units used in industry. 1 week Bonding Review. Orbitals, electron configuration, bonding, Lewis structures, polarity 2 weeks Chemistry Problem solving. Empirical formulas, Percent compositions, Stoichiometry, Gas laws, Solutions and their concentrations, Equilibrium, Kinetics, Thermodynamics 4.5 weeks Analysis of Experimental Data. Quality control, histograms, basic Statistical testing. 3 weeks Interpreting process flow diagrams, Mass and energy balance calculations. 3 weeks Examinations. 1 week Keeping a Scientific Notebook 1/2 week

FORM E Rev. May 2013

MODIFY A COURSE

Course Data Entry Form

I. ACTION TO BE TAKEN: MODIFY A COURSE

Desired Term Effective (201508):

II. COURSE TO BE MODIFIED:

a. Course Prefix CHEM b. Number 240 c. Title Indust Chemical Calculations

LIST THE LETTER(S) OF ALL CHANGES FROM SECTION III BELOW. s, t See Appendix E Instructions for Completing Forms.

III. Modifi(CATIONS: Enter ONLY	the modification(s)	s) proposed.		
a. Coun	se Prefix	b, Number	c. Contact Hours LECture LAB Seminar [Enter hours per week in box. See formula for contact hours to credit hours in Appendix E.]		
	Practicum (x) box as appropriate.	INDependent See definitions in A			
e. Cou	rse Title:	(Limit to 30 chara	racters including punctuation and spaces.)		
f. Colle	ge Code: g. Departr	nentCode: I	h. Credit Hours: Check (x) type 🔲 Variable 🔲 Fixed		
i. Enter	number in box: Mii	nimum Credit Hour	urs j.Maximum Credit Hours		
	Be Repeated for Added Max Times or Max C	l Credit: Check (x) Credits Awarded) 🗌 Yes 🔲 No		
I. Level	ls: Check (x)	🔲 Undergradu	duate 🔲 Graduate 🔲 Professional		
m. Gra	de Method: Check (x)	🔲 Normal Gra	rading 🔲 Credit/No Credit (Pass/Fail)		
n. Doe	s proposed new course r	eplace an equivale	lent course? Check (x) 🔲 Yes 🛄 No		
o. Equi	ivalent course: Prefix	Number			
p. CAT	ALOG DESCRIPTION-	Limit to 125 words	ds PLEASE BE CONCISE.		
q. Tem	n(s) Offered:	r. Max S	Section Enrollment: Section(s) Affected:		
s. Prere	equisites or Restrictions:	CHEM 122 with a	a grade of C- or better		
t. Co-re	equisites: None				
•	-		d & Measures Coding and General Education Code		
		eral Education (GE)	E) Cocupational Education (OC) G.E. Codes		
UCC Chair Sig		1615	Academic Affairs Approval Signature/Date:		
Office of the Registrar use ONLY					
Date Rec'd:	Dat	e Completed:	Entered: SCACRSE SCADETL SCARRES SCAPREQ		

COURSE INFORMATION FORM

Complete all items below

Check all boxes where modifications are being made. Enter the modification to be made.

Course Identification

	Prefix	Cŀ
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Credit Hours 4

HEM INumber 245

LEC <u>1</u> LAB <u>8</u> SEM ___.

Title Chemical Manufacturing and Analysis

Correquisites Co-requisite (Current) CHEM 321 and 231 (Proposed) CHEM 321 and 231 with a C- or better in each course

Course Description: A laboratory intensive course stressing the preparation and analysis of various materials including plastics, pesticides, petroleum products, as well as a variety of pure substances. Characterization by instrumental methods, testing by use of American Society tests and materials methods, and notebook keeping are also emphasized. Lecture topics include polymer synthesis and characterization as well as special topics in analysis.

Course Outcomes and Assessment Plan

Upon completion of this course, a student will:

- 1. Complete projects in a timely fashion with presentable results.
- 2. Deliver a talk in front of a group of their peers.
- 3. Use a variety of reagents and analytical techniques and integrate this with basic wet chemical and instrumental skills to solve laboratory problems.
- 4. Operate independently and collaboratively while working as part of a team.
- 5. Interpret and follow directions to produce reliable data, using standard and poorly defined methods for synthetic procedures.
- 6. Compose a high quality laboratory notebook in content and form.
- 7. Work safely in the lab at all times.
- 8. Complete basic analytical and synthetic chemistry projects while working with real world samples.

The outcomes for this chemistry course are assessed with a variety of methods including internal and external examinations, guizzes, presentations, laboratory notebooks, and/or laboratory reports.

Course Outline including Time Allocation

Keeping a Scientific Notebook	1 week
Polymer ID and Synthesis	2 weeks
Industrial Methodology and Sampling	1 week
Advanced Concepts of Equilibria	2 weeks
Applied Gravimetric Concepts	1 week
Isolation of an Active Ingredient	2 weeks
Fermentation	2 weeks
Special Titrimetric Analyses	3 weeks
Exams	1 week

MODIFY A COURSE

Course Data Entry Form	Rev. September 2012					
I. ACTION TO BE TAKEN: MODIFY A COURSE						
Desired Term Effective (201508):						
II. COURSE TO BE MODIFIED:						
a. Course Prefix CHEM b. Number 245 c. Title Chemical Manufacturing and Analysis						
IST THE LETTER(S) OF ALL CHANGES FROM SECTION III BELOW. s iee Appendix E Instructions for Completing Forms.						
III. MODIFICATIONS: Enter ONLY the modification(s) proposed.						
a. Course Prefix b. Number c. Contact Hours LECture LAB Seminar [Enter hours per week in box. See formula for contact hours to credit hours in Appendix E.]						
d. Practicum INDependent Study [Check (x) box as appropriate. See definitions in Appendix E.]						
e. Course Title: (Limit to 30 characters including punctuation and spaces.)						
f. College Code: g. Department Code: h. Credit Hours: Check (x) type 🔲 Variable 🔲 Fixed						
i. Enter number in box: Minimum Credit Hours j.Maximum Credit Hours						
k. May Be Repeated for Added Credit: Check (x) Yes No If yes, Max Times or Max Credits Awarded						
I. Levels: Check (x) 🗌 Undergraduate 🗌 Graduate 🔲 Professional						
m. Grade Method: Check (x) 🛛 Normal Grading 🔲 Credit/No Credit (Pass/Fail)						
n. Does proposed new course replace an equivalent course? Check (x) 🛛 Yes 🔲 No						
o. Equivalent course: Prefix Number						
p. CATALOG DESCRIPTION – Limit to 125 words – PLEASE BE CONCISE.						
q. Term(s) Offered: r. Max Section Enrollment: Section(s) Affected:						
s. Prerequisites or Restrictions: CHEM 321 and 231 with a C- or better in each course						
t. Co-requisites:						
To be completed by Academic Affairs Office: - Standard & Measures Coding and General Education Code						
Basic Skill (BS) General Education (GE) Occupational Education (OC) G.E. Codes G.E. Codes						
UCC Chair Signature/Date: Academic Affairs Approval Sign	ature/Date:					
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ate Rec'd: Date Completed:Entered: SCACRSE SCADETL SCARRES SCAPREQ						

FORM F Rev. September 2012

Complete all items below

Check all boxes where modifications are being made. Enter the modification to be made.

Course Identification

Prefix	CHEM
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Number 317

LEC _2 LAB _4 _ SEM __.

Title Instrumental Analysis

Credit Hours 3

Prerequisites (Current) CHEM 231 with a D- or Better (Proposed) CHEM 231 with a C- or better Co-requisite (Current) CHEM 322 (Proposed) None

Course Description: The theory and instrumentation of modern analytical techniques will be explored, including potentiometry, infrared (IR) spectroscopy, nuclear magnetic resonance (NMR) spectroscopy, atomic absorption (AA) spectroscopy, and gas chromatography. Concurrent laboratory work includes projects involving these techniques. This course meets General Education requirements: Scientific Understanding, Lab.

Course Outcomes and Assessment Plan

Upon completion of this course, a student will:

- 1. Describe and discuss basic working instrumental theory for a variety of common laboratory instruments.
- 2. Evaluate instrument performance and analyst performance in chemical lab procedures.
- 3. Operate independently while working on open ended lab exercises.
- 4. Operate instruments while completing laboratory exercises.
- 5. Prepare professional lab reports.
- 6. Recognize, record, and analyze analytical instrumental data.
- 7. Demonstrate safe handling and disposal protocol when handling chemical reagents.
- 8. Solve mathematical and technical problems related to chemical lab instruments.

The outcomes for this chemistry course are assessed with a variety of methods including internal and external examinations, quizzes, presentations, laboratory notebooks, and/or laboratory reports.

Course Outline including Time Allocation

Introduction: Review of units, graphing, and data	1 week
Potentiometry: ion-specific electrodes	1.5 weeks
Radiant Energy: Refractive index, turbidity	1.5 weeks
Gas Chromatography	1.5 weeks
Infrared Spectroscopy	1.5 weeks
Nuclear Magnetic Resonance Spectroscopy	1.5 weeks
Atomic Spectroscopy: Emission, Absorption	1.5 weeks
Automated Techniques	1 week
Mass Spectrometry	1 week
Visible and UV Spectroscopy	1 week
Liquid Chromatography	1 week
Examinations	1 week

MODIFY A COURSE

MODIFY A COURSE Course Data Entry Form	FORM F Rev. September 2012
I. ACTION TO BE TAKEN: MODIFY A COURSE	
Desired Term Effective (201508):	
II. COURSE TO BE MODIFIED:	
a. Course Prefix CHEM b. Number 317 c. Title Instrumental Analysis	
LIST THE LETTER(S) OF ALL CHANGES FROM SECTION III BELOW. s, t See Appendix E Instructions for Completing Forms.	
III. MODIFICATIONS: Enter ONLY the modification(s) proposed.	
a. Course Prefix b. Number c. Contact Hours LECture LAB Seminar [Enter hours per week in box. See formula for contact hours to credit hou	rs in Appendix E.]
d. Practicum INDependent Study [Check (x) box as appropriate. See definitions in Appendix E.]	
e. Course Title: (Limit to 30 characters including punctuation and spaces.)	
f. College Code: g. Department Code: h. Credit Hours: Check (x) type 🛄 Variable 🔲 Fixed	
i. Enter number in box: Minimum Credit Hours j.Maximum Credit Hours	
k. May Be Repeated for Added Credit: Check (x) Yes No If yes, Max Times or Max Credits Awarded	
I. Levels: Check (x) 🔲 Undergraduate 🛄 Graduate 🔲 Professional	
m. Grade Method: Check (x) 🛛 🔲 Normal Grading 🔲 Credit/No Credit (Pass/Fail)	
n. Does proposed new course replace an equivalent course? Check (x) 🛛 Yes 🖾 No	
o. Equivalent course: Prefix Number	
p. CATALOG DESCRIPTION – Limit to 125 words – PLEASE BE CONCISE.	
q. Term(s) Offered: r. Max Section Enrollment: Section(s) Affected:	
s. Prerequisites or Restrictions: CHEM 231 with a C- or better	
t. Co-requisites: None	
To be completed by Academic Affairs Office: - Standard & Measures Coding and General Education Code Basic Skill (BS) General Education (GE) Occupational Education (OC)	G.E. Codes
	nic Affairs Approval Signature/Date:
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Complete all items below

Check all boxes where modifications are being made. Enter the modification to be made.

Course Identification

Prefix CHEM	Number 321	LEC <u>4</u> LAB <u>3</u> SEM
Title Organic Chemistry	1	
Credit Hours 5	Prerequisites CHEM 122 with C- or better	Co-requisite None

Course Description: Modern bonding theory in organic molecules, theory of reactions, stereochemical principles, chemistry of alkanes, cycloalkanes, alkenes, dienes, alkynes, aromatics, and alcohols, with special emphasis on reaction mechanisms. Concurrent laboratory includes basic laboratory techniques, synthesis, TLC and GC, stereochemistry and spectroscopy workshops. This course meets General Education requirements: Scientific Understanding, Lab.

Course Outcomes and Assessment Plan

Upon completion of this course, a student will:

- 1. Demonstrate the techniques necessary to plan and execute the synthesis, purification and characterization of organic compounds.
- 2. Predict relative physical and spectral properties of organic compounds based on chemical structures.
- Predict chemical reactivity of organic compounds based on their chemical structure functionality, size, shape, regio-, and stereochemistry emphasis on the chemistry of hydrocarbons and haloalkanes.
- 4. Identity functional groups in chemical structures, systematically name molecules given their structures, and draw structures given their names.
- 5. Draw reaction energy profile diagrams and illustrate reaction mechanisms.

The outcomes for this chemistry course are assessed with a variety of methods including internal and external examinations, quizzes, presentations, laboratory notebooks, and/or laboratory reports.

Course Outline including Time Allocation Atoms to molecules: orbital structure and theories of bonding 1 week Charge, polarity and stability: inductive and resonance effects 1 week Equilibria and Acid/Base chemistry 1 week Naming, physical properties and conformational states of alkanes 1 week Cycloalkanes: nomenclature, ring strain, conformational vs configurational change 1 week Stereochemistry 1 week Preparation, naming, physical properties, and chemical properties of alkenes and conjugated dienes 2 weeks Preparation, naming, physical properties, and chemical properties of Alkynes 1 week Preparation, naming and reactions of haloalkanes 1 week Substitution and elimination reactions at the saturated carbon 1 week Structure determination by mass spectrometry and UV-Vis, infrared, and NMR spectroscopy 2 weeks Structure, physical properties, naming and spectroscopy of aromatic compounds 1 week 1 week Testing



Complete all items below

Check all boxes where modifications are being made. Enter the modification to be made.

Course Identification

Prefix CHEM

1 🗌 Number 322

LEC 4 LAB 3 SEM (current)

Title Organic Chemistry 2

Credit Hours 5

Co-requisites Co-requisite None (Current) CHEM 321 with D- or better or CHEM 221 (Proposed) CHEM 321 with C- or better

Course Description: Study of ethers and epoxides, carbonyl-containing compounds, aldehydes, ketones, carboxylic acids and their derivatives, carbanion chemistry, aliphatic and aromatic nitrogen-containing compounds, with special emphasis on bioorganic compounds, amino acids and polypeptides, carbohydrates and lipids. Concurrent laboratory includes multistep synthesis, spectroscopic analysis, and the systematic identification of organic compounds with emphasis on chemical separation and purification techniques. This course meets General Education requirements: Scientific Understanding.

Course Outcomes and Assessment Plan

Upon completion of this course, a student will:

- 1. Design multistep syntheses of organic compounds.
- 2. Plan and execute the synthesis, purification, and characterization of organic compounds.
- 3. Predict relative physical and spectral properties of organic compounds based on chemical structures.
- Predict chemical reactivity of organic compounds based on their chemical structure functionality, size, shape, regio-, and stereochemistry emphasis on arenes and compounds containing oxygen, nitrogen and sulfur.
- 5. Identity functional groups in chemical structures, systematically name molecules given their structures, and draw structures given their names.
- 6. Draw reaction energy profile diagrams and illustrate reaction mechanisms.

The outcomes for this chemistry course are assessed with a variety of methods including internal and external examinations, quizzes, presentations, laboratory notebooks, and/or laboratory reports.

Course Outline including Time Allocation

Reactions of aromatic compounds	2 weeks
Preparation, naming, physical properties, spectroscopy and reactions of alcohols and phenols	1.5 weeks
Preparation, naming, physical properties, spectroscopy and reactions of ethers and epoxides	1 week
Preparation, naming, physical properties, spectroscopy and reactions of thicls and sulfides	0.5 weeks
Preparation, naming, physical properties, spectroscopy and reactions of aldehydes and ketones	2 weeks
Preparation, naming, physical properties, spectroscopy and reactions of carboxylic acids and derivatives	2.5 weeks
Carbonyl alpha-substitution reactions	2.5 weeks
Preparation, naming, physical properties and reactions of amines and heterocycles	1 week
Biomolecules	1 week
Testing	1 week

MODIFY A COURSE

Course Data Entry Form

I. ACTION TO BE TAKEN: MODIFY A COURSE

Desired Term Effective (201508):

II. COURSE TO BE MODIFIED:

a. Course Prefix CHEM b. Number 322 c. Title Organic Chemistry 2

LIST THE LETTER(S) OF ALL CHANGES FROM SECTION III BELOW. s See Appendix E Instructions for Completing Forms.

III. MODIFICATIONS: Enter ONLY the modification(s) proposed.

a. Course Prefix	b. Number c. Contact Hours LECture LAB Seminar [Enter hours per week in box. See formula for contact hours to credit hours in Appendix E.]
d. 🔲 Practicum [Check (x) box as approp	INDependent Study te. See definitions in Appendix E.]
e. Course Title:	(Limit to 30 characters including punctuation and spaces.)
f. College Code: g. D	artment Code: h. Credit Hours: Check (x) type 🔲 Variable 🔲 Fixed
i. Enter number in box:	Minimum Credit Hours j.Maximum Credit Hours
k. May Be Repeated for If yes, Max Times or	ded Credit: Check (x) 🔲 Yes 🔲 No ax Credits Awarded
I. Levels: Check (x)	Undergraduate Graduate Professional
m. Grade Method: Chec) 🔲 Normal Grading 🔲 Credit/No Credit (Pass/Fail)
п. Does proposed new c	se replace an equivalent course? Check (x) 🔲 Yes 🛄 No
o. Equivalent course: Pr	k Number
p. CATALOG DESCRIP	N Limit to 125 words - PLEASE BE CONCISE.
q. Term(s) Offered:	r. Max Section Enrollment: Section(s) Affected:
s. Prerequisites or Restri	ons: CHEM 321 with a C- or better
t. Co-requisites:	
· ·	airs Office: - Standard & Measures Coding and General Education Code General Education (GE) G.E. Codes G.E. Codes
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Complete all items below

Check all boxes where modifications are being made. Enter the modification to be made.

Course Identification

	Prefix CHEM	Number 324	□ LEC <u>3</u> LAB <u>SEM</u> .
	Title Fund of Biochemistr	у	
	Credit Hours 3	Prerequisites CHEM 214 or 322 with C- or better	Co-requisite None
Course Description: An introductory course that examines the dependence of living systems on interactions of biological compounds such as proteins, carbohydrates, lipids, and nucleic acids at the molecular level. Credit will not be given for both CHEM 324 and CHEM 364. This course meets General Education requirements: Scientific Understanding.			

Course Outcomes and Assessment Plan

Upon completion of this course, a student will:

- 1. Relate basic chemical/physical properties of molecules to their utilization in cellular functions.
- 2. Describe the structure and function of major classes of biological molecules: proteins, nucleic acids, carbohydrates, lipids and vitamins.
- 3. Recognize key characteristics of enzymes.
- 4. Apply the Michaelis-Menten model to determine enzyme kinetic constants.
- 5. Describe the components, characteristics, and functions of biological membranes.
- 6. Compare and contrast anabolism and catabolism.
- Summarize the major pathways of metabolism in terms of importance, location, starting material, key steps, end products, and energy changes: glycolysis, fermentation, gluconeogenesis, glycogen metabolism, pyruvate dehydrogenase complex, citric acid cycle, pentose phosphate pathway, electron transport chain, oxidative phopsphorylation, photosynthesis, Calvin cycle, β-oxidation, fatty acid biosynthesis, and amino acid metabolism.
- 8. Recognize the functions of hormones that control metabolism.
- 9. Summarize DNA replication, transcription and translation, and their applications in biotechnology: recombinant DNA technology and polymerase chain reactions.

The outcomes for this chemistry course are assessed with a variety of methods including internal and external examinations, quizzes, presentations, laboratory notebooks, and/or laboratory reports.

 Course Outline including Time Allocation Introduction - Biochemistry, Biomolecules, Cell Water and Life - The Chemistry of Acids, Bases, and Buffers Amino Acids and Proteins - Structures and Functions Enzymes - Activity and Regulation Carbohydrates - Structures and Roles in Living Systems Bioenergetics - Intro to Metabolism and ATP Carbohydrate Metabolism The TCA Cycle - A Metabolic Distribution Point Electron Transport Chain and Oxidative Phosphorylation Lipid s - Structures and Roles in Living Systems Lipid Metabolism - Nitrogen in Living Systems Metabolism Recap - Regulation by Hormones Nucleic Acids - Structures and Functions, Central Dogma Biotechnology Testing 	1 week 1 week 1.5 weeks 1 week 0.5 weeks 1.5 weeks 1 week 1 week 1 week 1 week 0.5 weeks 0.5 weeks 1 week 0.5 weeks 1 week
Testing	1 week



COURSE INFORMATION FORM (New Course)



Complete all items below

Check all boxes where modifications are being made. Enter the modification to be made.

Course Identification

Prefix CHEM	Number 342	🛛 LEC <u>3</u> LAB <u>3</u> SEM
Title Fermentation (Chemistry	
	_	

Credit Hours 4	Prerequisites	Co-requisite None
	CHEM 364 and BIOL 122 with C	- or better in each course

Course Description: An introduction to the science of fermentation and the use of microorganisms for the synthesis and production of chemical compounds. Topics will include the role of raw materials, control of temperature and sanitation in both aerobic and anaerobic environments, stylistic differences in beer, wine, and cheese, and the production of other chemical synthesis starting materials via a fermentation process. Concurrent laboratory sessions will include experiments illustrating the principles discussed in lecture.

Course Outcomes and Assessment Plan

Upon completion of this course, a student will:

- 1. Identify the procedures and equipment used in commercial fermentation production.
- Explain the chemical and/or biological sources for the diversity of style in current and historical production of beer, wine, cheese, and other fermented products.
- 3. Produce fermented food and beverage products in a safe and healthy lab environment.

The outcomes for this chemistry course are assessed with a variety of methods including internal and external examinations, guizzes, presentations, laboratory notebooks, and/or laboratory reports.

☑ Course Outline including Time Allocation

Beer Fermentation (including cider) Raw Ingredients Process Packaging	4 weeks
Style Differences	
Wine and Vinegar Fermentation	3 weeks
Grape Varieties	
Other Fermentable Fruits	
Primary/Secondary Fermentation	
Oxidation and Vinegar Production	
Science of Cheese	2 weeks
Process and Variation	
Aging	
Industrial Fermentation	5 weeks
Raw materials	
Process Requirements	
Purification and Isolation	
Product Reliability	
Testing	1 week

CREATE NEW COURSE

Course Data Entry Form

FORM F Rev. September 2012

COMPLETE ALL SECTIONS BELOW. If this course is to be used as a prerequisite for other university courses, Form F's that reflect the prerequisite change must be submitted for those courses as well. See Appendix E Instructions for Completing Forms.

I. ACTION TO BE TAKEN: CREATE A NEW COURSE

Desired Term Effective: 201508

II. NEW COURSE ATTRIBUTES:

a. Course Prefix CHEM	b. Number 342 c. Contact Hours LECture 3 LAB 3 Seminar
d. 🗌 Practicum	INDependent Study
e. Course Title:	Fermentation Chemistry
f. College Code: ASg. Departr	nent Code: Phys h. Credit Hours: 4 Check (x) type 🔲 Variable 🖂 Fixed
i. Enter number in box: Mi	nimum Credit Hours 4 j. Maximum Credit Hours 4
k. May Be Repeated for Addeo If yes, Max Times or Max C	Credit: Check (x) Yes No Credits Awarded
I. Levels: Check (x)	🖾 Undergraduate 🔲 Graduate 📄 Professional
m. Grade Method: Check (x)	🖾 Normal Grading 🔲 Credit/No Credit (Pass/Fail)
n. Does proposed new course	replace an equivalent course? Check (x) 🗌 Yes 🛛 No
o. Equivalent course: Prefix	Number
p. CATALOG DESCRIPTION-	Limit to 125 words – PLEASE BE CONCISE.
the role of raw materials,	ience of fermentation and the use of microorganisms for the synthesis and production of chemical compounds. Topics will include control of temperature and sanitation in both aerobic and anaerobic environments, stylistic differences in beer, wine, and cheese, er chemical synthesis starting materials via a fermentation process. Concurrent laboratory sessions will include experiments liscussed in lecture.
q. Term(s) Offered: Spring C- or better in each course	r. Max Section Enrollment: Lecture: 18 Lab: 18 s. Prerequisites or Restrictions: CHEM 364 and BIOL 122 with a
t. Co-requisites:	

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COURSE INFORMATION FORM (New Course)

Complete all items below

Check all boxes where modifications are being made. Enter the modification to be made.

Course Identification

\boxtimes	Prefix	CHEM	
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🛛 Number 345

⊠ LEC <u>1</u> LAB <u>8</u> SEM <u>.</u>

I Title Chemical Manufacturing and Analysis II

Credit Hours 4	🔀 Prerequisites	Co-requisite None
	CHEM 245 and CHEM 317 with	n C- or better in each course

Course Description: A laboratory intensive course building on the principles and skills developed in CHEM 245 that covers foods, steroids, isotopic labeling, antibiotics, monomers, polymers, rubbers, dyes, medicines, and insecticides. Lab work involves assays in addition to common instrumental forms of analysis. The course will develop proficiency in the theory and application of the following instruments: FT-IR, H-NMR, ¹³C-NMR, GC, GC-MS, Refractometry, UV-Vis, HPLC, and AAS. The course will further develop proficiency in technical writing abilities, lab safety and documentation protocols, and the safe use and disposal of advanced chemical reagents.

Course Outcomes and Assessment Plan (Proposed)

- Upon completion of this course, a student will:
 - 1. Demonstrate safe handling and disposal protocol when handling reactive and hazardous research grade chemical reagents.
 - 2. Apply advanced laboratory synthetic methods and techniques.
 - 3. Employ complex techniques of using instrumental analysis.
 - 4. Report technical results, handling complex data appropriately.
 - 5. Plan and prepare for complex synthetic processes.

The outcomes for this chemistry course are assessed with a variety of methods including internal and external examinations, quizzes, presentations, laboratory notebooks, and/or laboratory reports.

\boxtimes	Course Outline including Time Allocation (Proposed) Oxidative addition and elimination studies and analyses Steric effects on synthetic processes and analyses Organometallic processes and analyses Isotopic labelling and analysis processes Preparatory techniques and analyses of insecticides Preparatory techniques and analyses of dyes Polymerization techniques and analyses Metal determination analysis techniques Analgesic preparatory techniques and analyses Food ingredient analysis techniques	2 weeks 2 weeks 1 weeks 1 weeks 1 weeks 3 weeks 1 weeks 1 weeks 1 weeks 1 weeks
	Research presentation	1 weeks

FORM E Rev. May 2013

CREATE NEW COURSE

Course Data Entry Form

COMPLETE ALL SECTIONS BELOW. If this course is to be used as a prerequisite for other university courses, Form F's that reflect the prerequisite change must be submitted for those courses as well. See Appendix E Instructions for Completing Forms.

I.	ACTION TO BE TAKEN: CRI	EATE A NEW COURSE				
	Desired Term Effective:	201508				
11.	NEW COURSE ATTRIBUTES	:				
	a. Course Prefix CHEM	b. Number 345 c. Contact Hours	LECture 1 LAB	Seminar		
	d. 🔲 Practicum	INDependent Study				
	e. Course Title:	Chemical Manufacturing and Analysis I	I			
	f. College Code: AS g. Depa	rtment Code: Phys h. Credit Hours: 4 Che	eck (x) type 🔲 Variab	e 🖾 Fixed		
	i. Enter number in box:	Minimum Credit Hours 4 j. Maximum C	redit Hours 4			
	k. May Be Repeated for Add If yes, Max Times or Ma	ed Credit: Check (x) 🛛 Yes x Credits Awarded	🛛 No			
	I. Levels: Check (x)	🛛 Undergraduate 🔲 Graduate	Professional			
	m. Grade Method: Check (x)	🛛 Normal Grading 🔲 Credit/No Cr	redit (Pass/Fail)			
	n. Does proposed new cours	e replace an equivalent course? Check (x)	🗆 Yes 🖾 No			
	o. Equivalent course: Prefix	Number				
	p. CATALOG DESCRIPTIO	N – Limit to 125 words – PLEASE BE CONC	ISE.			
	dyes, medicines, and insect application of the following	rrse building on the principles and skills dev ticides. Lab work involves assays in additio instruments: FT-IR, H-NMR, 1 ³ C-NMR,GC, and documentation protocols, and the safe u	n to common instrumenta GC-MS, Refractometry,	I forms of analysis. The cour JV-Vis, HPLC, and AAS. The	se will develop proficiency in the theory	and
	q. Term(s) Offered: Spring C- or better in each course	r. Max Section Enrollment	Lecture: La	e: 12 s. Prerequisites or R	estrictions: CHEM 245 and CHEM 317	with
	t. Co-requisites:					
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FORM F

Rev. September 2012

Complete all items below

Check all boxes where modifications are being made. Enter the modification to be made.

Course Identification

Prefix CHEM	Number 364	🗌 LEC <u>4</u> LAB <u>SEM</u> .
Title Biochemistry	Ŷ	
Credit Hours 4	Prerequisites CHEM 322 with C- or better	Co-requisite None
Course Descript	ion: A rigorous course in the chemistry of si	uch biomolecules as amino acids, polypeptide

Course Description: A rigorous course in the chemistry of such biomolecules as amino acids, polypeptides, proteins and enzymes, carbohydrates, lipids and nucleic acids. The structure/function relationships of these biomolecules will be stressed and the biosynthetic and biodegradative pathways discussed. Credit will not be given for both CHEM 324 and CHEM 364. This course meets General Education requirements: Scientific Understanding.

Course Outcomes and Assessment Plan

Upon completion of this course, a student will:

- 1. Master new concepts, facts and skills to support analysis and interpretation of biochemical processes.
- 2. Apply chemistry concepts and skills acquired in previous courses to living systems to reveal the molecular nature of life.
- 3. Evaluate unfamiliar biochemical information in multiple formats and interpret by analogy to familiar information
- 4. Relate reductionist information into an integrated view of biomolecular behavior.
- 5. Relate chemical structures of biomolecules to biological function

The outcomes for this chemistry course are assessed with a variety of methods including internal and external examinations, quizzes, presentations, laboratory notebooks, and/or laboratory reports.

 Course Outline including Time Allocation Introduction: review of pH & buffers Proteins: amino acids & peptides (structure & analysis) Hemoglobin: oxygen binding & allostery Connective tissue proteins Enzymes: kinetics, mechanisms Regulation of enzyme activity Lipids & membranes Carbohydrates Intro to metabolism Glycolysis Citric Acid cycle Oxidative phosphorylation Pentose Phosphate pathway & Gluconeogenesis Glycogen metabolism Fatty Acid metabolism Amino Acid degradation & the Urea Cycle Photosynthesis Biosynthesis of membrane lipids & steroid hormones Biosynthesis of Nucleotides Metabolism: Recapitulation DNA & RNA: structure & analysis Gene expression Control of gene expression Special topics: vision, motility, viruses, membrane assembly 	1 day 6 days 2 days 1 day 4 days 2 days 3 days 2 days 3 days 2 days 2 days 1 day 2 days 1 day 2 days 1 day 2 days 1 day 2 days 1 day 2 days 3 days
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FORM E Rev. May 2013

Complete all items below

Check all boxes where modifications are being made. Enter the modification to be made.

Course Identification

Prefix CHI	EM
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🗌 Number 381

LEC <u>3</u> LAB <u>SEM</u>.

Title Inorganic Chemistry

Credit Hours 3

Prerequisites
 Co-requisite None
 (Current) CHEM 321
 (Proposed) CHEM 321 with a C- or better

Course Description: On overview course covering the fundamental principles and theories of inorganic chemistry, with emphasis on the chemistry of the d block elements. Included topics are molecular structure, electronic structure and spectra, bonding descriptions and reaction mechanisms of coordination complexes along with an introduction to organometallic compounds of d block elements and an introduction to molecular symmetry and point groups. Students who plan to pursue graduate study in chemistry are recommended to take this course.

Course Outcomes and Assessment Plan

- Upon completion of this course, a student will:
 - 1. Construct molecular orbital diagrams for inorganic complexes and correlate these diagrams with electronic absorption spectra.
 - 2. Describe bonding and stabilization energies in coordination complexes using molecular orbital theory and crystal field theory.
 - 3. Identify molecular symmetry point groups of compounds.
 - 4. Apply group theory to bonding and vibrational spectroscopy of inorganic compounds.
 - 5. Rationalize and apply the 18-electron rule to transition metal coordination complexes...
 - 6. Identify common reaction mechanisms of coordination complexes and explain which factors affect the rates of these reactions.
 - 7. Identify trends and correlations in the descriptive chemistry of the main group elements.
 - 8. Carry out calculations involving unit-cell dimensions

The outcomes for this chemistry course are assessed with a variety of methods including internal and external examinations, quizzes, presentations, laboratory notebooks, and/or laboratory reports.

Molecular Symmetry Bonding in Polyatomic Molecules Structure and Energetics of Metallic and Ionic Solids Coordination Complexes Common Reaction Mechanisms of Coordination Complexes Introduction to Organometallic Compounds Chemistry of the Main Group Elements	1 week 2.5 weeks 1 week 4 weeks 1 week 2.5 weeks 1 week 1 week 1 week
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MODIFY A COURSE

Course Data Entry Form

I. ACTION TO BE TAKEN: MODIFY A COURSE

Desired Term Effective (201508):

II. COURSE TO BE MODIFIED:

a. Course Prefix CHEM b. Number 381 c. Title Inorganic Chemistry

LIST THE LETTER(S) OF ALL CHANGES FROM SECTION III BELOW. See Appendix E Instructions for Completing Forms.

III. MODIFICATIONS: Enter ONLY th			
a. Course Prefix E	o. Number c. Contact Hours [Enter hours per week i	LECture LAB Seminar in box. See formula for contact hours to cr	redit hours in Appendix E.]
d. □ Practicum [Check (x) box as appropriate. S	INDependent Study See definitions in Appendix E.]		
e. Course Title:	(Limit to 30 characters including punctuatio	in and spaces.)	
f. College Code: g. Departme	ent Code: h. Credit Hours: Check (;	x) type 🔲 Variable 🔲 Fixed	
i. Enter number in box: Mini	mum Credit Hours j. Maximum Credit Ho	urs	
k. May Be Repeated for Added C If yes, Max Times or Max Cro	Credit: Check (x) 🛛 Yes edits Awarded	🗖 No	
I. Levels: Check (x)	🗌 Undergraduate 🔲 Graduate	Professional	
m. Grade Method: Check (x)	Normal Grading Credit/No Cred	lit (Pass/Fail)	
n. Does proposed new course re	place an equivalent course? Check (x)	🗋 Yes 🔲 No	
o. Equivalent course: Prefix	Number		
p. CATALOG DESCRIPTION-L	imit to 125 words – PLEASE BE CONCIS	Ε.	
q. Term(s) Offered:	r. Max Section Enrollment:	Section(s) Affected:	
s. Prerequisites or Restrictions: (CHEM 321 with a C- or better		
t. Co-requisites:			
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COURSE INFORMATION FORM (New Course)

Complete all items below

Check all boxes where modifications are being made. Enter the modification to be made.

Course Identification

Prefix CHEM	Number 442	🛛 LEC <u>3</u> LAB <u>3</u> SEM <u>.</u>
☑ Title Fermentation Analy	sis	
🔀 Credit Hours 4	Prerequisites CHEM 317 and either BIOL 218	Co-requisite None 3 or 286 with C- or better in each course

Course Description: A survey of the analytical chemical and biological methods used in monitoring and maintaining a fermentation production facility. Topics will include assessment of raw materials, in-stream production monitoring, post production analysis and adherence to style guidelines, industry standards (ASBC Methods of Analysis), and product stability. Concurrent laboratory sessions will include experiments illustrating the principles discussed in fecture.

Course Outcomes and Assessment Plan

Upon completion of this course, a student will:

- 1. Understand the role of styles guidelines for beer, wine, and cheese in historical, commercial, and recreational contexts.
- 2. Apply current Methods of Analysis (ASBC Approved) in determining appropriate parameters in pre- and post-fermentation of beer.
- 3. Identify reporting requirements and legal limitations in the commercial production of alcoholic beverages and food products.
- 4. Identify and apply current pre- and post-fermentation analysis practices for must and wine.

Monitor active fermentations, both in-stream and post-production, identify problems that exist, and propose remedies for those problems.
 The outcomes for this chemistry course are assessed with a variety of methods including internal and external examinations, quizzes, presentations, laboratory notebooks, and/or laboratory reports.

Course Outline including Time Allocation

Beer Analysis (including cider) Style Guidelines – BA, AHA, BJCP Methods of Analysis – ASBC Monitoring – In production, Post packaging	4 weeks
Wine, Cheese, and Vinegar Analysis Sensory Panels Clean Rooms Lab Organization	4 weeks
Factors that Impact Product Stability Identification and Removal of Trace Contaminants Oxygen Levels and Staling	3 weeks
Complications Associated with Byproducts present in Living Syste Signal Masking Methods of Separation Sample Preparation	ems 3 weeks
Testing	l week

FORM E Rev. May 2013

CREATE NEW COURSE

Course Data Entry Form

FORM F

Rev. September 2012

COMPLETE ALL SECTIONS BELOW. If this course is to be used as a prerequisite for other university courses, Form F's that reflect the prerequisite change must be submitted for those courses as well. See Appendix E Instructions for Completing Forms.

I. ACTION TO BE TAKEN: (CREATE A NEW COURSE
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	Desired Term Effective:	201508				
11. N	NEW COURSE ATTRIBUTES:					
	a. Course Prefix CHEM	b. Number 442 c. Contact Hours	LECture 3 LAB	3 Seminar		
	d. 🔲 Practicum	INDependent Study				
	e. Course Title:	Fermentation Analysis				
	f. College Code: AS g. Depar	tment Code: Phys h. Credit Hours: 4 Che	eck (x) type 🔲 Varial	ole 🛛 Fixed		
	i, Enter number in box: N	/inimum Credit Hours 4 j. Maximum C	redit Hours 4			
	k. May Be Repeated for Adde If yes, Max Times or Max	d Credit: Check (x) 🛛 Yes Credits Awarded	🛛 No			
	I. Levels: Check (x)	🛛 Undergraduate 🔲 Graduate	Professional			
	m. Grade Method: Check (x)	🛛 Normal Grading 🔲 Credit/No Cr	edit (Pass/Fail)			
	n. Does proposed new course	e replace an equivalent course? Check (x)	🗌 Yes 🖾 No			
	o. Equivalent course: Prefix	Number				
	p. CATALOG DESCRIPTION	- Limit to 125 words - PLEASE BE CONCI	SE.			
	assessment of raw mater		post production anal	sis and adherence to	ation production facility. Topics will include style guidelines, industry standards (ASBC M principles discussed in lecture.	lethods
	q. Term(s) Offered: Fall or 286 with a C- or better in e	r. Max Section Enrollment: each course	Lecture: 18 La	b: 18 s . Prerequisite:	s or Restrictions: CHEM 317and either BIOL 218	
	t. Co-requisites:					
Tob	a completed by Academic Affair	rs Office: - Standard & Measures Coding and	d General Education Co	Io		
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Complete all items below

Check all boxes where modifications are being made. Enter the modification to be made.

Course Identification

Prefix (CHEM	🗆 Ni
🔲 Title In	tro to Physical	Chemistry
Credit	Hours 4	

2.

LEC <u>4</u> LAB <u>SEM</u>.

Prerequisites Co-requisite None (Current) PHYS 212 or 242; & MATH 220 & CHEM 322 with a D- or better in each course (Proposed) PHYS 212 or 242; & MATH 220 & CHEM 322 with a C- or better in each course

Course Description: An overview course covering some of the fundamental topics, of physical chemistry including the gas state, the first and second laws of thermodynamics, free energy, physical and chemical equilibrium, electrochemistry, chemical kinetics, reaction mechanisms, and the solid state.

Course Outcomes and Assessment Plan

Upon completion of this course, a student will:

- 1. Identify the role and limitations of using models in ideal and real systems to describe chemical behavior.
 - Solve chemical problems in thermodynamics and kinetics including:
 - a. Differentiation of heat, work, energy, enthalpy, etc.

Number 451

- b. Amounts of heat, work, and energy change for various processes.
- c. Reaction and state change calculations and phase diagrams.
- d. Integrated rate laws and rate laws calculations.
- Explain the application of theory to chemical systems including the Kinetic Molecular Theory of Matter and the application of Collision Theory and Transition State Theory in describing chemical kinetics.
- 4. Identify sources for past investigations on specific chemical topics in the literature, locate these sources, and summarize the work done in both oral and written reports.

The outcomes for this chemistry course are assessed with a variety of methods including internal and external examinations, quizzes, presentations, laboratory notebooks, and/or laboratory reports.

Course Outline including Time Allocation

The Gaseous State	2 weeks
The First and Second Laws of Thermodynamics	2 weeks
Free Energy	2 weeks
Chemical and Physical Equilibria	2 weeks
Electrochemistry	1 week
Chemical Kinetics, Diffusion, and Rates of Transport	2 weeks
Quantum Mechanics and Spectroscopy	1 week
Literature Searching	1 week
Presentation and Evaluation of Reports	1 week
Testing	1 week

MODIFY A COURSE

Course Data Entry Form

I. ACTION TO BE TAKEN: MODIFY A COURSE

Desired Term Effective (201508):

II. COURSE TO BE MODIFIED:

a. Course Prefix CHEM b. Number 451 c. Title Intro to Physical Chemistry

LIST THE LETTER(S) OF ALL CHANGES FROM SECTION III BELOW. See Appendix E Instructions for Completing Forms.

111.	MODIFICATIONS:	Enter ONLY	the modification(s) proposed.
------	----------------	------------	-------------------------------

a. Course Prefix	b. Number	c. Contact Hours [Enter hours per we	LECture LAB eek in box. See formula for co	Seminar ntact hours to credit hours in Appendix E.]	
d. 🔲 Practicum [Check (x) box as approp	INDepende priate. See definitions in	nt Study			
e. Course Title:	(Limit to 30 cha	acters including punct	uation and spaces.)		
f. College Code: g. D	epartment Code:	h. Credit Hours: Che	ck (x) type 🛛 🗌 Variable	Fixed	
i. Enter number in box:	Minimum Credit Hou	ırs j.Maximum Credit	Hours		
k. May Be Repeated for If yes, Max Times or	Added Credit: Check (x) Max Credits Awarded	🗌 Yes	🔲 No		
I. Levels: Check (x)	🔲 Undergrad	luate 🔲 Graduate	Professional		
m. Grade Method: Checi	:(x) 🗌 Normal Gr	ading 🔲 Credit/No (Credit (Pass/Fail)		
n. Does proposed new o	ourse replace an equiva	entcourse? Check (x)	🗌 Yes 🔲 No		
o. Equivalent course: Pr	efix Number				
p. CATALOG DESCRIP	FION – Limit to 125 wor	Is – PLEASE BE CON	CISE.		
q. Term(s) Offered:	r. Max	Section Enrollment	Section(s) Affected:		
s. Prerequisites or Restri	ctions: PHYS 212 or 24	2; & MATH 220 & CHI	EM 322 with a C- or better in	each course	
t. Co-requisites:					
e completed by Academic.		-	nd General Education Code al Education (OC)	G.E. Codes	
hair Signature/Date:				Academic Affairs Approval S	gnature/Date:
	<u> </u>				<u> </u>
		Of	fice of the Registrar use ON	LY	
ec'd:	Date Completed:	Entered: SCACR	SESCADETL	SCARRES SCAPR	FO

s

COURSE INFORMATION FORM (New Course)



Complete all items below

Check all boxes where modifications are being made. Enter the modification to be made.

Course Identification

\boxtimes	Prefix CHEM	🛛 Number 491	\boxtimes	LEC	LAB <u>9</u>	SEM
\boxtimes	Title Chemistry Internship	1				
\boxtimes	Credit Hours 3	CHEM 245 and 317 with C- or be	etteri		uisite Non ourse	e

Course Description: The student will participate in an external internship, generally at either an industrial chemistry, academic research, or governmental laboratory site. The internship will reinforce essential technical skills and provide for networking and application opportunities.

Course Outcomes and Assessment Plan

Upon completion of this course, a student will:

- 1. Demonstrate independence while conducting procedures and experiments in laboratory setting.
- 2. Develop and broaden their network of contacts in the professional community.
- 3. Recognize lab safety expectations and follow them as deemed appropriate by their internship supervisor.
- 4. Explain and report their results in both written and oral form to an appropriate audience.

The outcomes for this chemistry course are assessed with a variety of methods including internal and external examinations, quizzes, presentations, laboratory notebooks, and/or laboratory reports.

Course Outline including Time Allocation

Participation in the internship position	85%
Presentation and evaluation of reports	15%

CREATE NEW COURSE

Course Data Entry Form

FORM F Rev. September 2012

COMPLETE ALL SECTIONS BELOW. If this course is to be used as a prerequisite for other university courses, Form F's that reflect the prerequisite change must be submitted for those courses as well. See Appendix E Instructions for Completing Forms.

I.	ACTION TO	BE TAKEN:	CREATE A NEW COURSE

Desired Term Effective: 201508

II. NEW COURSE ATTRIBUTES:

Date Rec'd: _____

	a. Course Prefix CHEM	b. Number 491	c. Contact Hours	LECture	LAB	Seminar
	d. 🛛 Practicum	INDepende	nt Study			
	e. Course Title:	Chemistry Intern	ship			
	f. College Code: AS g. Depart	ment Code: Phys	h. Credit Hours: 3 Che	ck (x) type 🗌] Variable 🛛	Fixed
	i. Enter number in box: M	linimum Credit Hou	rs 3 j. Maximum C	redit Hours 3		
	k. May Be Repeated for Added If yes, Max Times 2 or Max	• •	🛛 Yes	🗌 No		
	I. Levels: Check (x)	🛛 Undergrad	uate 🔲 Graduate	Profes	sional	
	m. Grade Method: Check (x)	🛛 Normal Gra	ading 🔲 Credit/No Cr	edit (Pass/Fail)		
	n. Does proposed new course	replace an equival	ent course? Check (x)	🗌 Yes	🛛 No	
	o. Equivalent course: Prefix	Number				
	p. CATALOG DESCRIPTION	– Limit to 125 word	s – PLEASE BE CONCI	SE.		
	The student will participation internship will reinforce e					mistry, academic research, or governmental laboratory site. The n opportunities.
	q. Term(s) Offered: Fall, Sprin better in each course	ng, Summer r. i	Max Section Enrollment	: Lecture:	Lab: 28	s. Prerequisites or Restrictions: CHEM 245 and 317 with a C- or
	t. Co-requisites:				÷	
Tobe	completed by Academic Affairs	s Office: - Standard	& Measures Coding and	d General Educa	ation Code	
	Basic Skill (BS)		•	Education (OC)		G.E. Codes
UCC CH	nair Signature/Date:	6				Academic Affairs Approval Signature/Date:
	21-3 3	16113				1_1
			Offi	ce of the Regis	trar use ONLY	

SCADETL

SCARRES

SCAPREQ _____

Date Completed: ____Entered: SCACRSE ___

Complete all items below

Check all boxes where modifications are being made. Enter the modification to be made.

Course Identification

□ LEC <u>3</u> LAB <u>3</u> SEM ___.

Title Introductory Physics 1

Credit Hours 4

Prerequisites Co-requisite None MATH 116 or 120 with C- or better or ACT Math 26 or SAT 590

Course Description: Basic concepts and applications of motion, force, energy, fluids, heat and sound. This course meets General Education requirements: Scientific Understanding, Lab.

Course Outcomes and Assessment Plan

Students will develop attitudes and beliefs that are favorable to learning physics.

Students will improve their communications, interpersonal, and questioning skills.

Students will develop a good functional understanding of mechanics, thermodynamics, & wave motion (including sound).

Students will develop lab skills.

Students will begin developing expert-like problem solving skills.

Number 211

The outcomes for this physics course are assessed with a variety of methods including internal and external examinations, quizzes, presentations, laboratory notebooks, and/or laboratory reports.

Course Outline including Time Allocation

Units and Significant Figures	2 weeks
Vectors and Scalars	2 weeks
Work and Energy	2 weeks
Angular Momentum	2 weeks
Solids and Fluids	2 weeks
Thermal Physics	2 weeks
Vibration and Wave Motion	2 weeks
Testing	1 week

FORM E Rev. May 2013

Complete all items below

Check all boxes where modifications are being made. Enter the modification to be made.

Course Identification

	Prefix	P
--	--------	---

HYS INumber 212

LEC <u>3</u> LAB <u>3</u> SEM ___.

Title Introductory Physics 2

Credit Hours 4

Prerequisites PHYS 211 with C- or better **Co-requisite None**

Course Description: Continuation of PHYS 211. Basic concepts and applications of electricity, magnetism, light and modern physics. This course meets General Education requirements: Scientific Understanding, Lab.

Course Outcomes and Assessment Plan

- 1. Students will be able to analyze simple Ohmic circuits.
- 2. Students will be able to describe the process of atomic emission and absorption and calculate the energy and wavelength of photons.
- 3. Students will be able to describe qualitatively and quantitatively the optical properties of eyeglasses and other lens combinations.
- 4. Students will use tools and instruments that allow them to design, analyze and evaluate physical principles and display data graphically, numerically or by text to illustrate those principles.
- Students will demonstrate competency in problem solving, teamwork and communication with regard to general physical principles relating to the area of electricity, magnetism, optics and atoms.
- 6. Students will understand the process of nuclear decay via the mechanisms of alpha decay, beta decay and gamma decay.
- 7. Students will understand the fundamental composition of matter with respect to electric charges and the concepts of electric and magnetic fields and forces, voltage and electrical power.

The outcomes for this physics course are assessed with a variety of methods including internal and external examinations, quizzes, presentations, laboratory notebooks, and/or laboratory reports.

Course Outline including Time Allocation

Express Time Allocation in one of the following formats for a 3 credit hour course; adjust accordingly:

Electric charges and electric forces	2 weeks
Electric current and resistors	2 weeks
Alternating current circuits	2 weeks
Reflection and refraction of light	2 weeks
Selected topics in Modern Physics	6 weeks
Testing	1 week

FORM E Rev. May 2013

Paula L Hadley-Kennedy

From:	Olukemi O Fadayomi
Sent:	Wednesday, March 04, 2015 3:37 PM
То:	Mark A Thomson
Cc:	Adnan Dakkuri; Brian Holton; David M Marion; Elise M Gramza; John Scott S Gray; Kristy L Motz; Mark A Hutchinson; Olukemi O Fadayomi; Paul Blake; Paula L Hadley-Kennedy;
	Tracey D Boncher; Victor I Piercey
Subject:	Proposal #15-058

UCC reviewed your B.S in Industrial Chemistry proposal, Proposal #15-058 today and we are holding it pending additional information.

We noticed that the Biology Department's request for a comparison table of the proposed degree and the existing BA Chemistry and BS Biochemistry degrees was not responded to. UCC will like to see the table as well. In addition, we ask that you and/or a representative attend the UCC meeting on Monday, March 16 at 12:00 noon in CSS 302 to answer questions about this proposal.

It would be helpful if you can provide the requested information to Paula by 12:00 noon on Wednesday, March 11, so that she can make it available to committee members before Monday's meeting.

As always, do not hesitate to contact me if I can be of further assistance. Hope to see you soon.

Kemi Olukemi Fadayomi, Ph. D Professor Department of Biological Sciences Ferris State University ASC 2009, 820 Campus Drive Big Rapids, MI 49307-2225

fadayok@ferris.edu Phone: (231) 591-5628 Fax: (231) 591-2540 Chemistry Course Requirements and Electives for Chemistry Degree Programs

		C. H.	Proposed BS	Proposed BS	BA	BA
			Fermentation	Manufacturing	Chemistry	Biochemistry
CHEM 121	General Chemistry 1	5	7	r	r	~ ~
CHEM 122	General Chemistry 2	5	Y	Y	N	N
CHEM 140	Orientation to Industrial Chemistry Technology	2	7	7		
CHEM 145	Safety and the Chemical Laboratory	2	7	r		
CHEM 231	Quantitative Analysis	4	7	Y	<u> </u>	
CHEM 240	Industrial Chemical Calculations	2	7	r		
CHEM 245	Chemical Manufacturing and Analysis	4	<u>k</u>	~		
CHEM 317	Instrumental Analysis	3	4	7	E ¹	
CHEM 321	Organic Chemistry 1	5	۸ (Ą	► K	۸
CHEM 322	Organic Chemistry 2	5	1	م ا	h h	٨
CHEM 324	Fundamentals of Biochemistry	£		<u>م</u>		
CHEM 332	Biochemistry Lab 1	2			E ¹	N
CHEM 333	Biochemistry Lab 2	2			E ¹	N
CHEM 342	Fermentation Chemistry	†	٨ ا			
CHEM 345	Chemical Manufacturing and Analysis II	4		N		
CHEM 364	Biochemistry	4	N		E1	N
CHEM 381	Inorganic Chemistry	£		∧		
CHEM 442	Fermentation Analysis	4	۸ (•
CHEM 451	Introduction to Physical Chemistry	4	٨	N	٧	N
CHEM 474	Advanced Biochemistry	3				X
CHEM 491	Chemistry Internship	3	4	Ŋ		

6 credit hours of electives chosen from these four courses

Paula L Hadley-Kennedy

From:	Don L Brecken
Sent:	Wednesday, March 18, 2015 9:08 AM
То:	Paula L Hadley-Kennedy; Chrystal R Roach
Cc:	Olukemi O Fadayomi
Subject:	RE: UCC support with concerns

I support with the same concern as Tracey.

Don Brecken | Instructor and Business Program Advisor | ASQ Fellow, CMQ/OE, RABQSA QMS-BI Ferris State University | Extended and International Operations 151 Fountain Street NE | Grand Rapids, MI 49503 (616) 643-5752 phone/fax · | ferris.edu/statewide · facebook.com/ferrisstatewide

"Quality is never an accident; it is always the result of high intention, sincere effort, intelligent direction and skillful execution; it represents the wise choice of many alternatives." - William A Foster

From: Paula L Hadley-Kennedy Sent: Wednesday, March 18, 2015 9:06 AM To: Don L Brecken; Chrystal R Roach Cc: Olukemi O Fadayomi Subject: FW: UCC support with concerns

Don/Chrystal:

Please send your note of support with concerns or confirm that the response below represents your decision.

Thanks! Paula

From: Tracey D Boncher Sent: Tuesday, March 17, 2015 10:16 AM To: Paula L Hadley-Kennedy; Paula Hadley-Kennedy Subject: UCC support with concerns

Paula,

I am in charge of writing up why the three of us supported the B.S. Industrial Chemistry with concerns. Here is the concern.

The CHEM 317 course and the integrity of the B.S. Degree in Industrial Chemistry needs to think long term and offer students the best possible equipment to make them competitive in the field. The current 80 MHz NMR Physical Science uses is out of date significantly. Most other universities have the standard 400MHz NMR and to make our students competitive and more aligned with other universities we feel they need to have a plan to upgrade this equipment to at least meet the minimum of what other universities are offering their students. Calvin and Hope college use their 400MHz for teaching purposes and have fewer than 4k overall students. FSU has about 15k students and as such we should have no problem at least meeting the minimum what other institutions are doing. We feel this would not only make the degree and students more marketable but also give them cutting edge experience they are likely to find in the real world when they start their jobs. Overall this would strengthen the program and degree.

Department of Physical Sciences Response to UCC Concerns of 3/17/2015

We are appreciative of the support from the University Curriculum Committee and the concern they expressed with their support in preparing and enacting this curriculum proposal. Some of the concerns raised match with internal discussions within our own department as we have tried to establish our own long term departmental and programmatic instrumental needs.

The chemists in our department recognize that a 400 MHz NMR (Nuclear Magnetic Resonance Spectrometer) would enhance our existing instrument facilities. We feel that the associated expenses incurred with obtaining and, more importantly, maintaining a 400 MHz NMR (Initial capital investment - ~ \$250K, Annual supplies and maintenance of the cryostat and cryogen - ~\$15K, Annual staffing needs or faculty release time - ~\$50K) are not justified at this time. Our view is that such resources would be better distributed elsewhere in our program, department, or college. We also note that such an instrument has not been included in the instrumentation proposed for the new Core Research Facility being developed on campus.

Graduate employers and advisory board members from our current AAS program in Industrial Chemistry have indicated that the strength that distinguishes Ferris State students from the graduates of other programs in the region is their hands-on familiarity with likely industrial instrumentation and lab equipment. A 400 MHz NMR is typically a research instrument operated and maintained by a specially trained technician. With such an instrument in place of our current 90 MHz NMR, students in both CHEM 322 (Organic Chemistry 2) and CHEM 317 (Instrumental Analysis) would likely either be removed of the opportunity to run their own samples for analysis or permitted to run far fewer samples under the supervision of the instrument operator. In either case, we believe the "hands-on" skills employers have come to expect from our graduates would be significantly diminished.

While a 400 MHz instrument would provide significant enhancements in terms of peak resolution and signal to noise ratio and would allow characterization of molecules more complex than those we currently study, this instrument offers little fundamental pedagogical advantage with regard to student determination of chemical shift, multiplicity, coupling constants and integration—the key concepts utilized for solving chemical structures.

#15-055

JAN 2 8 2015 FORM A

Revised September 2014

PROPOSAL SUMMARY AND ROUTING FORM

Proposal Title: Bachelor of Science in Spanish for the Professions

Initiating Individuals: Ana Dávila-Howard, Eric Warner, Gustavo Rodríguez-Morán, Lucero Flores-Páez, Kristin Oplinger Initiating Department or Unit: Languages & Literature Department

Contact Person's Name: Eric Warner e-mail: warnere3@ferris.edu phone: 231-591-5049

- Group I A New degree, major, concentration, minor, or redirection of a current offering
- Group I B Deletion of a degree, major, concentration, or minor
- Group II A New Course, modification of a course, deletion of a course
- Group II B Minor curriculum clean-up
- Group III Certificates (C College Credit Non-Credit) New Certificate
- Group IV Other Site Locations (C College Credit Non-Credit)

	Signature Print and sign your name.	Date	Vote/Action * Number count **
Program Representative **	Eric Warner, PLD	28 JAN 2015	Support Support with Concerns Not Support Abstain
Department/School/Faculty Representative Vote ** <	Debra K. Court night - Nash	1-28-15	<u>Support</u> Support with Concerns Not Support Abstain
Department/School Administrator	Debra K. Courtright - Nash Debra K Courtget 7 Vorw	1-28-15	_/Support _ØSupport with Concerns _ØNot Support
College Curriculum Committee/Faculty	Alther Cray	2-16-15	6 Support Support with Concerns Not Support Abstain
Dean	July J. Andy Karafa	2/18/15	Support & -⊘ Support with Concerns Not Support
University Curriculum Committee **	Olukem, Fadayomi		Support % → Ø Support with Concerns Not Support Abstain
Senate **	l		Support Support with Concerns Not Support Abstain
Academic Affairs			Support Hold Not Support

* Support with Concerns or Not Support <u>must</u> include identification of specific concerns with appropriate rationale. ** Number count <u>must</u> be given for all members present and/or voting.

To be completed by Academ	nic Affairs Date/Ter	m of Implementation:	
President (Date Approved)	Board of Trustees (Date Approved)	Academic Officers of MI (Date Approved)	

COLLEGE OF ARTS & SCIENCES FERRIS STATE UNIVERSITY

TO:Kemi Fadayomi, Chair, UCCFROM:J. Andy Karafa Associate Dean, Arts & SciencesRE:Spanish for the Professions B.S.DATE:02/18/15

The CAS dean's office supports the attached proposal with the following caveats:

- The College Curriculum Committee required the program faculty to add the statement, "Students entering below a 300 level are recommended to take 102, 201, and 202 as general education electives" to the checksheet. Although I appreciate the Committee's desire to reduce "hidden" program requirements, this belongs on the advising portion of the checksheet, not the "Graduation Requirements" section. I have struck this out as it may complicate the program's scribing into MyDegree.
- Also required was the statement, "Major coursework requirements must be completed prior to or at the time of the awarding of a baccalaureate or higher degree." This seems redundant and unnecessary. I have struck this out, as well, although I suspect it does no harm.
- Other changes (e.g., course outlines) were made between the College Committee's approval and mine— in consultation with the program faculty. None change the nature of the program. These can be listed, if desired.

In the case of the first two items, I have not had the opportunity to discuss this with the Committee. It is my intention to do so; however, I wanted to keep this moving to hit the next deadline.

Paula L Hadley-Kennedy

From: Sent: To: Cc: Subject: Olukemi O Fadayomi Friday, February 27, 2015 12:15 PM Gustavo Rodriguez Paula L Hadley-Kennedy RE: Spanish and the Profession Proposal Changes

Thank you!

Kemi Olukemi Fadayomi, Ph. D Professor Department of Biological Sciences Ferris State University ASC 2009, 820 Campus Drive Big Rapids, MI 49307-2225

fadayok@ferris.edu Phone: (231) 591-5628 Fax: (231) 591-2540

From: Gustavo Rodriguez
Sent: Friday, February 27, 2015 10:54 AM
To: Olukemi O Fadayomi
Cc: Gustavo Rodriguez
Subject: Spanish and the Profession Proposal Changes

Dear Olukemi,

The Spanish Faculty are aware of the changes that the Associate Dean, Andy Karafa, made to our proposal. We want to let you know that we agree with them.

Thanks

Gustavo Rodriguez-Moran Ph. D. Assistant Professor of Spanish ASC 3036 Ferris State University

1

Department of Languages and Literature

Major Proposal: Bachelor of Science in Spanish for the Professions

College of Arts and Sciences

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PROPOSED

			FRUFUSLD
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1. Proposal Summary

(Summary is generally less than one page. Briefly: state what is proposed with a summary of rationale and highlights.) The Hispanic/Latino population in West Michigan has increased rapidly in the last decade, increasing needs of the Hispanic/Latino population in areas like medicine, business, public safety and education. In the Grand Rapids area alone, the population has increased from 13% (2000) to 19% (2009). Employers in fields such as education, criminal justice, health care, social work and engineering recognize the importance of hiring bilingual personnel.

Although there are other postsecondary Spanish degrees in Michigan, this Bachelor of Science in Spanish for the Professions degree program at Ferris will have a distinct purpose and approach: it will focus on Spanish for the professions and on Spanish in the Americas, including Spanish language and Hispanic/Latino culture in the United States.

The major has been constructed considering the most current needs of a diverse community; that is, it will prepare students with the right tools to expand their professional service abilities to a wider community in the areas of education, medical Professions, social work, and criminology. The Bachelor of Science in Spanish for the Professions will take advantage of the current offerings in our catalog for Spanish as well as the cultural courses offered from other departments on campus. The newly developed courses on topics include: Spanish and Culture for the Professions, Internships in Spanish, a Senior Capstone course, as well as profession-specific courses for the medical, business, and social services career fields.

The major is tailored to provide students at Ferris State University with a hands-on approach to language use in the region. With a B.S. in this major, students would have several advantages. They will have the opportunity to participate in community-based experiences, in partnership with the Center for Latin@ Studies, Ferris State University's newly created Latino Business and Economic Development Center, and other locally-based organizations. In addition, they will complete an internship with Spanish-speaking populations either locally or abroad. Students will also complete a Senior Capstone course to culminate their experiences in the classroom with their experiences in the professional arena.

With the competitive job market, our students will have greater opportunities and will be better prepared for their job search, as evidenced by the growing frequency of job market offerings that seek bilingual and culturally aware employees. There is student interest and demand for this initiative. Presently, 45 students are declared minors and 39 students responded that they are considering a Spanish minor. In a recent survey of students in Ferris State University's Spanish courses, 18 students indicated that they are definitely interested in a Spanish major, while 91 students would consider a Spanish major. Survey data from students enrolled at Ferris indicated their support: 47% of respondents indicated that a Spanish major "would greatly increase job opportunities in [their] field." In addition, 49% of the respondents reported that it was "likely" or "very likely" they would enroll in Spanish as a second major.

Taking into consideration our career-focused majors and our commitment to focus on the Spanish-speaking community here, Ferris will be poised to fulfill a niche that several other universities in Michigan do not currently provide. This degree is designed as a stand-alone degree, and also as a complimentary degree to Ferris' technical and professional degree programs, perfectly supplementing programs offered across FSU and KCAD. Currently, students who seek a double major in Spanish and another field cannot do so at Ferris. With this Spanish major, there is potential of recruiting more students to double majors. This new major will also enhance our current Spanish minor offerings by allowing students to learn Spanish for specific purposes.

The deans of the colleges of education, optometry, pharmacy, and allied health and the heads of the criminal justice and the engineering programs have expressed a strong interest in the creation of a major and any other initiative to increase the Spanish language proficiency of their graduates. Representatives from every college attended a focus group with Latino community leaders to discuss how language development will better serve their graduates.

2. Summary of Curricular Action (check all that apply to this proposal)

Degree 🖾 Major 🗌 Minor 🗌 Concentration 🗌 Certificate 🖾 Course

New Modification Deletion

Name of Degree, Major, etc. : _Bachelor of Science in Spanish for the Professions

3. Summary of All Course Action Required Contact Senate Secretary or UCC Chair if additional spaces are required.

a. Newly Created Courses to be Added to FSU Catalog:

FIEIX	Number mile	
SPAN	350	Spanish and Culture for the Professions
SPAN	430	Business Spanish
SPAN	431	Spanish for Health Professions

SPAN	432	Spanish for Social Services and Outreach
SPAN	491	Internship in Spanish
SPAN	499	Senior Capstone

- b. Courses to be Deleted from FSU Catalog: Prefix Number Title
- c. Existing Course(s) to be Modified: Prefix Number Title
- d. Addition of existing FSU courses to program

Prefix	Number Title	
SPAN	101	Beginning Spanish I
SPAN	102	Beginning Spanish II
SPAN	201	Intermediate Spanish I
SPAN	202	Intermediate Spanish II
SPAN	301	Advanced Spanish I
SPAN	302	Advanced Spanish II
SPAN	333	Contemporary Culture-Society of Hispanic America
SPAN	343	Hispanic Cinema
SPAN	323	Survey of Spanish Literature
SPAN	331	Contemporary Culture-Society of Spain
SPAN	497	Special Topics
ANTH	371	Medical Anthropology
COMM	365	Intercultural Communication
COMM	366	Diversity and Communication
FILM	360	Gender and Race in Film
FREN	331	French Culture
GEOG	372	World Medical Geography
GERM	331	German Culture
GERM	341	Representations of the Holocaust
HIST	375	Latin American History
INTB	310	International Business Systems
INTB	335	Cross-Cultural Business
LITR	306	Topics in Non-Western World Literature
LITR	380	World Folk Literature
NURS	316	Transcultural Nursing
PLSC	341	International Politics
SOCY	340	Race and Ethnicity in the U.S.

e. Removal of existing FSU courses from program Prefix Number Title

4. Summary of All Consultations

Form Sent (B or C)	Date Sent Responding Dept.	Date Received & by Whom			
Form B	Social Sciences Humanities Languages & Literature Management Nursing) 			
Form C	FLITE				
5. Will External Accredit	ation be sought? (For new progr	ams or certificates only)			
Yes	🖂 No				
If yes, name the organ	ization involved with accreditatio	on for this program.			
6. Is a PCAF required?	<u>X</u> YesNo Is the F	PCAF approved? X Yes No			
Link to approved PC	A <i>F:</i> http://www.ferris.edu/HTMLS/	administration/academicaffairs/vpoffice/PPAF/2014-Spanish-BS.pdf			
7. Program Checksheet	s affected by this proposal (chec	k all that apply to this proposal)			
Add Course Delete Course Modify Course Change Prerequisite Move from required to elective Change Outcomes and Assessment Plan Change credit hours					
8. List all Checksheets	affected by this proposal:				
College	Department	Program			
Arts & Sciences	Languages & Literature	Bachelor of Sciences in Spanish for the Professions Major			

FORM B Rev. September 2012

To be completed by each department affected by the proposed change, addition, or deletion. Potential duplication of coursework is reason for consultation.

- 1. This completed form must be forwarded with the proposal to the administrator of the department to be consulted.
- The department must respond within 10 business days of receipt of this form to insure inclusion in the final proposal. The completed original is returned to the Academic Senate office to be inserted into the proposal and a copy is returned to the initiator.

The department must acknowledge receipt of this form and the proposal in writing to the initiator.

Failure to respond by 10 business days of receipt of this form is interpreted as support for the proposal.

The Proposing Department must address any concerns raised by the consulted department. This response must be in writing and will be included in the proposal following the original consultation form.

RE: Proposal Title Bachelor of Science in Spanish for the Professions

Initiator(s): Ana Dávila-Howard, Eric Warner, Gustavo Rodríguez-Morán, Lucero Flores-Páez, Kristin Oplinger

Proposal Contact: Eric Warner Date Sent: ____Jan 28, 2015____

Department: Languages & Literature Campus Address: ASC 3080

Responding Department: Nursing

Administrator: Susan Owens Date Received: 2-4-15 Date

Date Returned: 2-17-15

Based upon department faculty review on 2-17-15 (date), we

Support the above proposal.

Support the above proposal with the modifications and concerns listed below. Do not support the proposal for the reasons listed below.

Comment regarding the impact this proposal has on current curriculum including prerequisites, scheduling, room assignments, and/or faculty load for your department. Use additional pages, if necessary.

Other health science students may be interested in this degree outside of nursing.

FORM B

Rev. September 2012

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RE: Proposal Title Bachelor of Science in Spanish for the Professions

Initiator(s): Ana Dávila-Howard, Eric Warner, Gustavo Rodríguez-Morán, Lucero Flores-Páez, Kristin Oplinger

Proposal Contact: Eric Warner Date Sent: Jan 28, 2015

Department: Languages & Literature Campus Address: ASC 3080

Responding Department: Social Sciences, ASC 2108-B

Administrator: Meral Topcu Date Received: 2/4/2015 Date Returned: 2/9/2015

Based upon department faculty review on _(date), we

X Support the above proposal. Support the above proposal with the modifications and concerns listed below. Do not support the proposal for the reasons listed below.

Comment regarding the impact this proposal has on current curriculum including prerequisites, scheduling, room assignments, and/or faculty load for your department. Use additional pages, if necessary.

FORM B

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RE: Proposal Title Bachelor of Science in Spanish for the Professions

Initiator(s): Ana Dávila-Howard, Eric Warner, Gustavo Rodríguez-Morán, Lucero Flores-Páez, Kristin Oplinger

Proposal Contact: Eric Warner Date Sent: Jan 28, 2015

Department: Languages & Literature Campus Address: ASC 3080

Responding Department: <u>Humanities, JOH 117</u>	
Administrator: <u>Trinidy Williams</u> Date Receive	d: 2 4 15 Date Returned: 2 16 15
2/4/15- 2// Based upon department faculty review on <u>(d</u> ate)	12/15 ,we



Support the above proposal. Support the above proposal with the modifications and concerns listed below. Do not support the proposal for the reasons listed below.

Comment regarding the impact this proposal has on current curriculum including prerequisites, scheduling, room assignments, and/or faculty load for your department. Use additional pages, if necessary.

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FORM B Rev. September 2012

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RE: Proposal Title Bachelor of Science in Spanish for the Professions

Initiator(s): Ana Dávila-Howard, Eric Warner, Gustavo Rodríguez-Morán, Lucero Flores-Páez, Kristin Oplinger
Proposal Contact: <u>Eric Warner</u> Date Sent: <u>Jan 28, 2015</u>
Department: <u>Languages & Literature</u> Campus Address: ASC 3080

Respondi	ng Department: <u>Mar</u>	agement, BUS 368		
Administra	tor: Gayle Lopez	Date Received:	_ Date Returned:	-
Based upo	on department faculty Support the above	review on (date), we 7.20) 15	

Support the above proposal. Support the above proposal with the modifications and concerns listed below. Do not support the proposal for the reasons listed below.

Comment regarding the impact this proposal has on current curriculum including prerequisites, scheduling, room assignments, and/or faculty load for your department. Use additional pages, if necessary.

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PRC	VOST

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3. The Proposing Department must address any concerns raised by the consulted department. This response must be in writing and will be included in the proposal following the original consultation form.

RE: Proposal Title Bachelor of Science in Spanish for the Professions

Initiator(s): Ana Dávila-Howard, Eric Warner, Gustavo Rodríguez-Morán, Lucero Flores-Páez, Kristin Oplinger

Proposal Contact: Eric Warner Date Sent: ___Jan 28, 2015_

Department: Languages & Literature Campus Address: ASC 3080

Responding Department: <u>Languages & Literature</u>		
Administrator: Debbie Courtright-Nash	Date Received:	Date Returned:

Based upon department faculty review on (date), we



Support the above proposal.

Support the above proposal with the modifications and

concerns listed below. Do not support the proposal for the reasons listed below.

Comment regarding the impact this proposal has on current curriculum including prerequisites, scheduling, room assignments, and/or faculty load for your department. Use additional pages, if necessary.

FLITE SERVICES CONSULTATION FORM

To be completed by the liaison librarian and approved by the Dean of FLITE. FLITE must return the original form to the Academic Senate office to be inserted in the proposal and a copy to the initiator. FLITE must respond within 10 business days of receipt of this form to insure that the form is included in the final proposal.

Failure to respond by 10 business days of receipt of this form is interpreted as support for the proposal.

RE: Proposal Title: Bachelor of Science in Spanish for the Professions

Projected number of students per year affected by proposed change: 600

Initiator(s): Ana Dávila-Howard, Eric Warner, Gustavo Rodríguez-Morán, Lucero Flores-Páez, Kristin Oplinger Proposal Contact: <u>Eric Warner</u> Date Sent: <u>Jan 28, 2015</u>
Department: Languages & Literature Campus Address: ASC 3080

Liaison Librarian Signatur	e: Paul D Kamperdine	
Date Received:	- AAA	
Dean of FLITE Signature: _	Date Returned: 21913	

Based upon our review on 2/9/15 (date), FLITE concludes that:

Library resources to support the proposed curriculum change are currently available.

Additional Library resources are needed but can be obtained from current funds.

Support but significant additional Library funds/resources are required in the amount of \$_____.

Does not support the proposal for reasons listed below.

X

 \Box

Comment regarding the impact this proposal will have on library resources, collection development, or other FLITE programs. Use additional pages if necessary

Form D Proposed Checksheet: Spanish for the Professions Ferris State University-Department of Languages & Literature Bachelor of Science Degree: Spanish for the Professions Checksheet-87 Credits Guide for students who enter the Fall 2015 Program and beyond

Name: _____ ID: _____

Second Major/Minor: _____

Г

Graduation	Requirements:				
		 All Spanish major courses under the prefix SPAN must b better, otherwise students must repeat the course A cumulative GPA of 2.0 in all coursework is required for This major requires a minimum of 40 credits at the 300 le 121 semester credits minimum, including general educat degree Students entering below a 300 level are recommended to education electives A maximum of 1/3 of the credits, but no more than 7 cred the student's major 	graduation vel or higher ion requirements, take 102, 201 and its, in a minor ma	to recei I 202 as y overla	ve general
	Program Req	uirements: Effective for Students entering Spanish for the Profession		0	
REC	QUIRED	COURSE TITLE-PREREQUISITES SHOWN IN ()	SEMESTER OFFERED	FSU S.H.	GRADE
SPANISH MA	AJOR COURSES	(38 credits)	 Other South Other South 		
SPAN	101*	Beginning Spanish I	Fall, Spr, Su	4	
SPAN	102*	Beginning Spanish II	Fall, Spr, Su	4	
SPAN	201*	Intermediate Spanish I	Fall, Spr, Su	4	
SPAN	202*	Intermediate Spanish II	Fall, Spr	4	
SPAN	301	Advanced Spanish I (SPAN 202 with a grade of C or better or with instructor approval)	Fall, Spring	4	
SPAN	302	Advanced Spanish II (SPAN 301 with a grade of C or better)	Fall, Spring	4	
SPAN	333	Contemporary Culture-Society of Hispanic America (SPAN 202 with a grade of C or better or with instructor approval)	Spring, Odd	3	
SPAN	343	Hispanic Cinema (SPAN 202 with a grade of C or better or with instructor approval)	Fall, Odd	3	
SPAN	350	Spanish and Culture for the Professions (SPAN 202 with a grade of C or better or with instructor approval)	Fall, Spring	3	
SPAN	491	Internship in Spanish (SPAN 350 with a grade of C or better and approval from the Spanish Internship Coordinator)	On Demand	3	
SPAN	499	Senior Capstone (SPAN 302, SPAN 491, and SPAN 430, 431 or 432 with a grade of C or better or with instructor approval)	Spring	2	
Electives (9 d	credits): choose	3 courses where one is related to your primary major			
SPAN	323	Survey of Spanish Literature (SPAN 202 with a grade of C or better or with instructor approval)	Fall, Even	3	
SPAN	331	Contemporary Culture-Society of Spain (SPAN 202 with a grade of C or better or with instructor approval)	Spring, Even	3	
SPAN	430	Business Spanish (SPAN 350 with a grade of C or better)	On Demand	3	
SPAN	431	Spanish for Health Professions (SPAN 350 with a grade of C or better)	Fall, Spring	3	
SPAN	432	Spanish for Social Services and Outreach	Fall Only	3	

PROPOSED

			and the first of t		PROPU
ODAN	407	(SPAN 350 with a grade of C or better)			ļ
SPAN	497	Special Topics	On Demand	3	
Intercultural/P	rofessional Co	urses (9 credits): choose 3 courses			이 온 은 안 단 상태 문 (
ANTH	371	Medical Anthropology (ANTH 122 or GEOG 112 or SOCY 121)	Fall Only	3	
COMM	365	Intercultural Communication	On Demand	3	
COMM	366	Diversity and Communication (COMM 105 or COMM 121 or COMM 221 or COMH 121)	Fall, Spr, Su	3	
FILM	360	Gender and Race in Film (ENGL 150)	Fall, Spring, Summer	3	
FREN	331	French Culture	Fall, Summer	3	•
GEOG	372	World Medical Geography	Spring Only	3	
GERM	331	German Culture	Spring, Summer	3	
GERM	341	Representations of the Holocaust	Fall, Spr, Su	3	
HIST	375	Latin American History (ENGL 250)	On Demand	3	
INTB	310	International Business Systems	Fall, Spr, Su	3	
INTB	335	Cross-Cultural Business	Fall Only	3	
LITR	306	Topics in Non-Western World Literature (ENGL 250)	Fall, Spr, Su	3	
LITR	380	World Folk Literature (ENGL 250)	On Demand	3	
NURS	316	Transcultural Nursing (NURS 324)	Spring Only	3	
PLSC	341	International Politics	Spring, Summer	3	
SOCY	340	Race and Ethnicity in the U.S. (SOCY 121 or ANTH 122)	Fall, Spr, Su	3	
Justice ; Film S Human Resour Journalism ; M	Studies; Foren ce Manageme ulticultural Re	, Advertising/Integrated Marketing Communications ; Communicati sic Science ; French; Health, Illness and Society; Homeland Securit nt ;International Business ; International Studies ; Lean Healthcare lations in the U.S; Political Science ;Public Relations ;Restaurant ar or ;Women and Gender Studies	y: Digital Security ; ; Marketing/Sales ;	and Fore Multi-Me	nsics; dia
ELECTIVES: to	total of 120 cr	edit hours			

• Students who test into a course higher than SPAN 101, 102, 201, or 202 via Webcape should see their Spanish program major advisor in order to complete the paperwork necessary to receive the appropriate credit hours towards the major.

I. GENERAL EDUCATION REQUIREMENTS

A. COMMUNICATION	COMPETENCE 12 Sem Cr.	
Course	Grade	Credit
ENGL 150		3
ENGL 250 or 211		3
ENGL 311 321, 323, or 325		3
COMM 105,121,221,or 251		3
Total		12

D. CULTURAL I	ENRICHME	NT 9 Sem Credits
		nay count toward this category. Requirements: (1) one (2) maximum 5 credit hours of music and/or theater activities
Course	Grade	Credit
200 + level		
Student may choose SPAN 201 and 202		
Total		

B. SCIENTIFIC UNDERSTANDING 7 Sem Credits

Only approved "Z" courses may count toward this category (one must be a lab course).

Course	Grade	Credit
Lab		
Total		

C. QUANTITATIVE SKILLS This requirement can be fulfilled by ONE of the following options

This requireme	an can be furthed by ONE of t	ne ionown	ly options:
X	Course	Grade	Credit
	MATH 115 or		
	higher or		
**************************************	MATH 115 or		3
	higher		
	proficiency or		
	ACT MATH		
	subtest score 24	Score:	
	or higher		
Total	******	•	1

Additional electives:		
Course	Grade	Credit
	l.	

E. SOCIAL AWARENESS 9 Sem Credits

Only approved "S" courses may count toward this category. Requirements: 1) two different subject areas including at least one "foundation" course, 2) one 200+ level course.

Course	Grade	
Foundation		
200+ level		
Total	1	

F. GLOBAL CONSCIOUSNESS

Each student must complete one course from the list of qualifying courses presented in the FSU catalog. This course may also count toward fulfilling the Cultural Enrichment or Social Awareness requirement.

Course:

G. RACE/ETHNICITY/GENDER

Each student must complete one course from the list of qualifying courses presented in the FSU catalog. This course may also count toward fulfilling the Cultural Enrichment or Social Awareness requirement.

Course:

Signatures

Student:	Date:
Advisor:	Date:
Dept. Chair:	Date:

Bachelor of Science in Spanish for the Professions	Program Outcomes and Means of Assessment
PROGRAM OUTCOMES	MEANS OF ASSESSMENT:
Listening Comprehension- Students will be able	Assessment methods may include oral interviews,
to respond in Spanish to diverse forms of oral	occupational fluency tests, and/or written reports
discourse in media, formal, informal, and	
specialized discourse for the professions related to	
their primary and secondary areas of study/interest.	
Conversation- Students will be able to initiate,	Assessment methods may include oral interviews,
maintain, and respond in Spanish to informal and	occupational fluency tests, and/or role-plays
formal conversation with native and non-native	
Spanish -speakers, and successfully handle	
language challenges such as idiomatic expressions,	
dialectal differences, and/or specialized vocabulary	
for the professions of their primary and secondary	
area(s) of study/interest.	
Reading Comprehension - Students will be able to	Assessment methods may include written reports,
read, critically analyze, and comment on various	quizzes, and/or exams
types of cultural texts produced in the Spanish-	
speaking world abroad and in the United States.	
Writing- Students will be able to write	Assessment methods may include written
compositions and reports utilizing specialized	reports/compositions, quizzes, and/or exams
vocabulary in Spanish and relevant expressions of	
the professions as pertaining to their primary and	
secondary areas of study/interest.	
Translation - Students will be able to exhibit the	Assessment methods may include translations of
skills of appropriate translation of documents and	documents, quizzes, and/or exams
reports from Spanish to English and vice-versa in	
their specific area(s) of study/interest.	
Interpretation- Students will be able to exhibit the	Assessment methods may include role-plays
skills of appropriate interpretation from Spanish to	and/or interpretation tests
English and vice-versa in their specific area(s) of	
study/interest.	
Culture of the Hispanic World-Students will be	Assessment methods may include presentations,
able to recognize and report on the diversity of	final projects, quizzes, and/or exams
cultures existing in the Spanish-speaking world,	
focusing on the Americas, including geography,	
history, arts, economy, politics, education, religion,	
and food, among other components of culture.	

Ferris State University-Languages & Literature Department

Spanish for the Professions: Sample Schedule for True Beginner

Tentative example of 4 year schedule for student entering with no prior Spanish

First Year

Fall	Credits	Spring	Credits
SPAN 101 Beginning Spanish I	4	SPAN 102 Beginning Spanish II	4
FSUS 100 Ferris State University Seminar	1	English Composition Credits (ex. ENGL 250)	3
English Composition Credits (ex. ENGL 150)	3	Advanced English/Speech Requirement (ex. COMM 251)	3
Speech Communication Credits (ex. COMM 121)	3	Scientific Understanding Credits with Lab (ex. BIOL 103 (w/ lab))	4
Quantitative Skills Requirement (ex. MATH 115)	3	*Secondary Area Elective	3
Total Credits	14		17

Second Year

Fall	Credits	Spring	Credits
SPAN 201 Intermediate Spanish I	4	SPAN 202 Intermediate Spanish II	4
Scientific Understanding Credits (ex. CHEM	3	Advanced English/Speech Requirement Credits	3
103 Preparatory Chemistry)		& Directed Intercultural-Professional Elective	
		(ex. LITR 380 World Folk Literature)	
Advanced English/Speech Requirement &	3	Social Awareness Credits & Directed	3
Directed Intercultural/Professional Elective &		Intercultural-Professional Elective (ex. PLSC	
Race-Ethnicity-Gender Credits (ex. LITR 306		341 International Politics)	
Topics in Non-Western World Lit.)			
Social Awareness Credits (ex. GEOG 112	3	Social Awareness Credits & Directed	3
Cultural Geography)		Intercultural-Professional Electives (ex. GEOG	
		372 World Medical Geography)	
*Secondary Area Elective	3	*Secondary Area Elective	3
Total Credits	17		17

Third Year

Fall	Credits	Spring	Credits
SPAN 301 Advanced Spanish I	4	SPAN 302 Advanced Spanish II	4
SPAN 350 Spanish and Culture for the Professions	3	SPAN 333 Contemporary Culture- Society of Hispanic America <u>or</u> SPAN 331 Contemporary Culture- Society of Spain	3
SPAN 343 Hispanic Cinema <u>or</u> SPAN 323 Survey of Spanish Literature	3	*Secondary Area Elective	3
*Secondary Area Elective	3	*Secondary Area Elective	3
*Secondary Area Elective	3	*Secondary Area Elective	3
Total Credits	16		16

Fourth Year

Fall	Credits	Spring	Credits
SPAN 491 Internship in Spanish	3	SPAN 499 Senior Capstone	2
SPAN 430 Business Spanish or	3	SPAN 333 Contemporary Culture-	3
SPAN 431 Spanish for Health Professions or		Society of Hispanic America or	
SPAN 432 Spanish for Social Services		SPAN 331 Contemporary Culture-	
and Outreach		Society of Spain	
SPAN 343 Hispanic Cinema or	3	*Secondary Area Elective	3
SPAN 323 Survey of Spanish Literature			
*Secondary Area Elective	3	*Secondary Area Elective	3
*Secondary Area Elective	3	*Secondary Area Elective	3
Total Credits	15		14

*Assumes student selected a second major that requires 39 credit hours to complete it

Ferris State University-Languages & Literature Department Spanish for the Professions: Sample Schedule for an *Advanced Spanish Student*

Tentative example of 4 year schedule for student entering with Spanish 202 or equivalent.

i not i cui	First	Year
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Fall	Credits	Spring	Credits
SPAN 301 Advanced Spanish I	4	SPAN 302 Advanced Spanish II	4
FSUS 100 Ferris State University Seminar	1	English Composition Credits (ex. ENGL 250)	3
English Composition Credits (ex. ENGL 150)	3	Advanced English/Speech Requirement (ex. COMM 251)	3
Speech Communication Credits (ex. COMM 121)	3	Scientific Understanding Credits with Lab (ex. BIOL 103 (w/ lab))	4
Quantitative Skills Requirement (ex. MATH 115)	3	*Minor Elective Class	3
Total Credits	14		17

Second Year

Fall	Credits	Spring	Credits
SPAN 350 Spanish and Culture for the	3	SPAN 430 Business Spanish or	3
Professions		SPAN 431 Spanish for Health Professions or	
		SPAN 432 Spanish for Social Services	
		and Outreach	
Scientific Understanding Credits (ex. CHEM	3	Advanced English/Speech Requirement Credits	3
103 Preparatory Chemistry)		& Directed Intercultural-Professional Elective	
		(ex. LITR 380 World Folk Literature)	
Advanced English/Speech Requirement &	3	Social Awareness Credits & Directed	3
Directed Intercultural/Professional Elective &		Intercultural-Professional Elective (ex. PLSC	
Race-Ethnicity-Gender Credits (ex. LITR 306		341 International Politics)	
Topics in Non-Western World Lit.)			
Social Awareness Credits (ex. GEOG 112	3	Social Awareness Credits & Directed	3
Cultural Geography)		Intercultural-Professional Electives (ex. GEOG	
		372 World Medical Geography)	
*Secondary Area Elective	3	*Secondary Area Elective	3
Total Credits	15		15

Third Year

Fall	Credits	Spring	Credits
SPAN 343 Hispanic Cinema or	3	SPAN 333 Contemporary Culture-	3
SPAN 323 Survey of Spanish Literature		Society of Hispanic America or	
		SPAN 331 Contemporary Culture-	
		Society of Spain	
*Minor Elective Class	3	*Minor Elective Class	3
*Minor Elective Class	3	*Secondary Area Elective	3
*Secondary Area Elective	3	*Secondary Area Elective	3
*Secondary Area Elective	3	*Secondary Area Elective	3
Total Credits	15		15

Fall	Credits	Spring	Credits
SPAN 491 Internship in Spanish	3	SPAN 499 Senior Capstone	2
SPAN 343 Hispanic Cinema or	3	SPAN 333 Contemporary Culture-	3
SPAN 323 Survey of Spanish Literature		Society of Hispanic America or	

		SPAN 331 Contemporary Culture-	
		Society of Spain	
*Minor Elective Class	3	*Secondary Area Elective	3
*Secondary Area Elective	3	*Secondary Area Elective	3
*Secondary Area Elective	3	*Secondary Area Elective	3
		*Minor Elective Class	3
Total Credits	15		17

*Assumes student selected a second major that requires 36 credit hours to complete it and a minor that requires 21 credits.

COURSE INFORMATION FORM

Complete all items below (New or Current).

Check all boxes where modifications are being made. Enter the modification to be made (Proposed).

Course Identification

□Prefix	□Number	□LEC LAB SEM (current)		
(proposed) SPAN	(proposed) 350	(Enter Contact Hours per week) LEC X LAB SEM (proposed):3		
□Title (proposed)				
Span Culture Professions				
□Credit Hours	□Prerequisites	Co-requisite		
(proposed) 3	(proposed) SPAN 202 with a grade	posed) SPAN 202 with a grade C or better or with instructor approval		

Course Description: (125 words maximum)

(proposed):

This course is designed to enhance Spanish communication skills and cultural knowledge for use in professional settings. This course covers a broad spectrum of career areas and will be beneficial to all professionals who want to communicate with the Spanish-Speaking community, both in the United States and abroad. It stresses cultural components used among Spanish speakers in the U.S. and abroad, formal and informal contexts of communication, and other unique linguistic features in Spanish dialects; such as Spanglish and code-switching. Students are also introduced to the concepts and practice of translation and interpretation. This course is the foundation for the more career-specific courses of SPAN 430, SPAN 431, and SPAN 432.

Course Outcomes and Assessment Plan (proposed)

SPAN 350: Spanish and Culture for the Professions				
COURSE OUTCOMES:	MEANS OF ASSESSMENT:			
Formal and Informal Communication - Students will be able to demonstrate oral and written competency to communicate in formal and informal situations in Spanish, in the United States and abroad.	Assessment methods may include oral and written quizzes and/or exams, or oral presentations			
Reading Comprehension- Students will be able to demonstrate reading comprehension on selected works and texts created by the Spanish-speaking community in the U.S. and by Spanish-speaking communities abroad, such as literature, newspapers articles and columns, and film.	Assessment methods may include oral and written reports and /or exams			
Dialectal Distinctions- Students will be able to identify, compare and contrast unique linguistic features that differentiate Spanish- speakers from other countries and Spanish in the US, code switching and Spanglish, for example.	Assessment methods may include oral and written reports and/or exams			
Basic Translation and Interpretation-	Assessment methods may include final project			
Students will be able to accurately translate	with the Hispanic community or in class			

and interpret paragraph-length texts in translation and/or interpretation exams		
articles or oral discourse from Spanish to English and vice versa related to a specific area or discipline of the student's interest.	articles or oral discourse from Spanish to English and vice versa related to a specific	translation and/or interpretation exams

Course Outline including Time Allocation (proposed)

Weeks 1-2: Spanish around The World

Includes a panoramic study of the Spanish language and its different regions and dialects, accents, and lexicology: Mexico, Central America, South America, Caribbean and Spain. It analyzes the history and importance of Spanish in the US. (6 hrs.)

Weeks 3-4: Linguistic Context

This unit introduces students to the study of Spanish as a discipline. It describes the importance of formal and informal contexts of written and oral communication: "tú" vs "usted", which affect conjugations, pronouns and commands. It also analyzes specific features of the US Spanish: code switching and Spanglish and its issues and prejudices on correctness and incorrectness. (6 hrs.)

Week 5: Linguistic Context (Language variation)

Includes sampling of dialects used both regionally and socially, also some discussion of Spanish in contact with other languages. (3hrs.)

Weeks 6-7: Linguistic Context (Pragmatics)

Lead into sociolinguistics with a focus on things like turn-taking, registers, and discourse communities. (3 hrs.)

Weeks 9-10: Reading and Writing Workshop

Students will read, analyze and discuss samples of various types of texts in US Spanish: film, Chican@/Latin@ literature, local newspapers in the Midwest. (10 hrs.)

Weeks 11-13: Translation and Interpretation

Introduction to translation and interpretation theory and techniques, it looks at helpful resources to achieve an accurate translation and basic interpretation. (10 hrs.)

14-15: Final Project / Presentations (4 hrs.)

Final project related to the student's specific area of interest.

TOTAL TIME ALLOCATION: 45 hours total (assuming 3 contact hours/week)

CREATE NEW COURSE

Course Data Entry Form

Rev. September 2012

COMPLETE ALL SECTIONS BELOW. If this course is to be used as a prerequisite for other university courses, Form F's that reflect the prerequisite change must be submitted for those courses as well. See Appendix E Instructions for Completing Forms.

I. ACTION TO BE TAKEN: CREATE A NEW COURSE

Desired Term Effective (6 digit code only):201508

II. NEW COURSE ATTRIBUTES:

a. Course Prefix SPAN b. Number 350 c. Contact Hours: 3 ⊠Lecture □LAB ⊡Seminar [Enter hours per week in box. See formula for contact hours to credit hours in Appendix E.] d Practicum Independent Study [Check (x) box as appropriate. See definitions in Appendix E.] e. Course Title: Span Culture Professions (Limit to 30 characters including punctuation and spaces.) f. College Code: AS g. Department Code: LANG h. Credit Hours: Check (x) type □Variable 🗵 Fixed i. Enter number in box: 3 Minimum Credit Hours j. 3 Maximum Credit Hours k. May Be Repeated for Added Credit: Check (x) □Yes ⊠No If yes, Max Times or Max Credits Awarded I. Levels: Check (x) Undergraduate Graduate Professional m. Grade Method: Check (x) ⊠Normal Grading Credit/No Credit (Pass/Fail) n. Does proposed new course replace an equivalent course? Check (x) **E**lYes ⊠No o. Equivalent course: Prefix Number p. CATALOG DESCRIPTION - Limit to 125 words - PLEASE BE CONCISE. This course is designed to enhance Spanish communication skills and cultural knowledge for use in professional settings. This course covers a broad spectrum of career areas and will be beneficial to all professionals who want to communicate with the Spanish-Speaking community, both in the United States and abroad. It stresses cultural components used among Spanish speakers in the U.S. and abroad, formal and informal contexts of communication, and other unique linguistic features in Spanish dialects; such as Spanglish and code-switching. Students are also introduced to the concepts and practice of translation and interpretation. This course is the foundation for the more career-specific courses of SPAN 430, SPAN 431, and SPAN 432. q. Term(s) Offered: F r. Max Section Enrollment: Lecture: 28 Lab: s. Prerequisites or Restrictions: SPAN 202 with a grade of C or better or with instructor approval t. Co-requisites: courses must be taken concurrently (if none, leave blank. Limit to 100 characters including punctuation and spaces.)

To be con	npleted by Academic	Affairs Office: - Standard & Mea	sures Coding and General I	Education Code		···· · · · · · · · · · · · · · · · · ·		
	Basic Skill (BS) 🗌	General Education (GE)	Occupational Education	(OC)	G.E	. Codes		
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Date Rec'd: _		Date Completed:Ent	ered: SCACRSE	SCADETL	SCARRES	SCAPREQ	•	

COURSE INFORMATION FORM

Complete all items below (New or Current).

Check all boxes where modifications are being made. Enter the modification to be made (Proposed).

Course Identification

🖾 Prefix	□Number			OLEC LAB	SEM (current)
SPAN	(proposed)	430(proposed)	(Enter Contact Hours per we	ek)	
□Title				LEC <u>3</u> LAB	B SEM(proposed):
	Business Spanish (p	proposed)			
□Credit Ho	urs		□Prerequisites		Co-requisite
	3 (proposed)	SPAN3	350 with a passing grade of C	or better (propos	ed)

Course Description: (125 words maximum)

(proposed): This course provides students with a working knowledge of business-related Spanish vocabulary, cultural practices, and cultural competencies to effectively navigate the Spanish-speaking business world. Students will write business documents and carry out day-to-day professional interactions in the target language through translation activities and role-plays. In addition to the various regions in Spanish-speaking countries studied throughout the course, the U.S. Latino market, the corresponding trade agreements in Brazil, the Americas and Europe will also be addressed, along with pertinent information regarding cultural differences and economic activity. Various sources of information will be utilized throughout the course, including books, videos, magazines, online newspapers, and guest speakers familiar with the domestic and/or international Spanish-speaking marketplace.

□Course Outcomes and Assessment Plan (proposed):

SPAN 430: Business Spanish	
COURSE OUTCOMES:	MEANS OF ASSESSMENT:
Business Documents- Students will be able to produce and translate business documents utilizing appropriate business vocabulary in Spanish.	Methods of assessment may include written samples and/or exams
Formal Communication - Students will be able to show an improved level in written and spoken Spanish as pertaining to formal interactions.	Methods of assessment may include written samples and/or role-play interactions
Business World- Students will be able to identify Spanish-speaking countries and regions, as well as current and potential trade partners.	Methods of assessment may include exams, portfolios and/or final projects
Cultural Competence - Students will be able to outline the cultural, political, and historical influence on current business- climate conditions in Latin America, Spain, and U.S. Latino regions and to report on current events relative to the business world in Spanish-speaking countries and regions.	Methods of assessment may include exams, portfolios and/or final projects

Торіс:	Description:	Time Allocation:
Cultural Competencies	Includes an overview of the region, its history, demographics, geography, and how the aforementioned affects present-day culture, politics, business practices, and business etiquette	15 hours
Trade Agreements	Entails the discussion and analysis of the over 12 initiatives in trade agreements/organizations in Latin America and Spain, including, but not limited to, NAFTA, MERCOSUR, FTAA, CAFTA-DR, ALBA, the European Union, ALADI, Andean community, etc.	9 hours
Business Writing	Class time will be devoted to introducing and illustrating the techniques needed to create business documents: memos, emails, letters	9 hours
Translation	Takes into account existing documents in English and will address the best practices for translating documents into Spanish, and vice versa	6 hours
Interpretation	This unit will serve as an introduction to interpreting and working with interpreters. Guest lecturers are intended to discuss interpreting, especially with the Latino community in the U.S.	3 hours
Formal Speaking	Students will create role-plays that simulate formal business meetings and interactions. Time will be dedicated to seeing how business people interact formally through videos.	3 hours

TOTAL TIME ALLOCATION: Hours (45 hours; assuming 3 contact hours per week)

CREATE NEW COURSE

Course Data Entry Form

PROPOSED FORM F Rev. September 2012

COMPLETE ALL SECTIONS BELOW. If this course is to be used as a prerequisite for other university courses, Form F's that reflect the prerequisite change must be submitted for those courses as well. See Appendix E Instructions for Completing Forms.

I. ACTION TO BE TAKEN: CREATE A NEW COURSE

Desired Term Effective (6 digit code only): 201701

II. NEW COURSE ATTRIBUTES:

a. Course Prefix SPAN b. Number 430 c. Contact Hours LEC <u>3</u> LAB <u>SEM</u> (current) [Enter hours per week in box. See formula for contact hours to credit hours in Appendix E.]

d Practicum Independent Study [Check (x) box as appropriate. See definitions in Appendix E.]

e. Course Title: Business Spanish

f. College Code: AS	g. Department Code: LANG	h. Credit Hours: 3	Check (x) type	Variable	I Fixed
i. Enter number in box: If yes, Max Times	<u>3</u> Minimum Credit Hours or Max Credits Awarded	j. <u>3</u> Maximum Credit H	ours k. May Be Repeate	ed for Added Credit: Chec	k (x) ⊡Yes 🖾 No
I. Levels: Check (x)	⊠Undergraduate □Gradua	te			
m. Grade Method: Che	eck (x) ⊠Normal ⊡Gradir	ig Credit/No Credit (Pa	ss/Fail)		
n. Does proposed new	course replace an equivalent co	urse? Check (x)	⊐Yes ⊠No		
o. Equivalent course:	Prefix Number				

p. CATALOG DESCRIPTION - Limit to 125 words - PLEASE BE CONCISE.

(proposed): This course provides students with a working knowledge of business-related Spanish vocabulary, cultural practices, and cultural competencies to effectively navigate the Spanish-speaking business world. Students will write business documents and carry out day-to-day professional interactions in the target language through translation activities and role-plays. In addition to the various regions in Spanish-speaking countries studied throughout the course, the U.S. Latino market, , the corresponding trade agreements in Brazil, the Americas and Europe will also be addressed, along with pertinent information regarding cultural differences and economic activity. Various sources of information will be utilized throughout the course, including books, videos, magazines, online newspapers, and guest speakers familiar with the domestic and/or international Spanish-speaking marketplace.

q. Term(s) Offered: SP r. Max Section Enrollment: 28 Lecture:⊠ Lab:□

s. Prerequisites or Restrictions: SPAN350 with a passing grade of "C" or higher.

t. Co-requisites: courses must be taken concurrently (if none, leave blank. Limit to 100 characters including punctuation and spaces.)

To be completed by Academic Affairs Office: - Standard & Measures Coding and General Education Code Basic Skill (BS) General Education (GE) Ccupational Education (OC)	G.E. Codes
UCC Chair Signature/Date:	Academic Affairs Approval Signature/Date:
Office of the Registrar use ONLY	<u>I</u>
Date Rec'd: Date Completed:Entered: SCACRSE SCADETL	SCARRES SCAPREQ

COURSE INFORMATION FORM

Complete all items below (New or Current).

Check all boxes where modifications are being made. Enter the modification to be made (Proposed).

Course Identification

🛛 Prefix	۵N	umber	LEC LAB SEM (current)	
(pro	posed) SPAN	(proposed) 431	(Enter Contact Hours per week) LEC x LAB SEM (proposed):3	
D Title	itle (proposed) Spanish for Health Professions			
□Credit Hours		□Prerequisites	Co-requisite	
3 (pro	posed)	SPAN350 with a passing grade of (C or better (proposed)	

□Course Description: (125 words maximum)

(Proposed) This course is designed for students in the medical field (nursing program, dental hygiene, optometry, pharmacy, etc.) who want to develop language-specific skills in this area. The main objective of the course is to provide health care providers with the necessary language skills to communicate more effectively with Spanish-speaking patients and to help them to provide better services to this community. In order to achieve these objectives, students will memorize dialogs and perform skits related to specific medical areas (e.g., assessing medical history and health risks, doctor-patient exams, etc.). Another important component of the course is the cultural readings that highlight Hispanic customs and traditions relevant to health care, as well as information on medical conditions and concerns affecting Latinos in the United States.

□Course Outcomes and Assessment Plan (proposed):

SPAN 431: Spanish for Health Professions				
COURSE OUTCOMES:	MEANS OF ASSESSMENT:			
Conversation- Students will be able to	Methods of assessment may include oral			
initiate and sustain field of expertise	interviews, role-plays, and/or oral exams			
conversation in Spanish using medical and				
health-care related expressions and				
terminology.				
Healthcare Documents- Students will be	Methods of assessment may include written			
able to produce, to translate and/or to fill out	samples, portfolios, and/or exams			
healthcare documents utilizing appropriate				
vocabulary, expressions and terminology in				
Spanish for the areas of nursing, dental				
hygiene, eye care, and other areas related to				
the medical field.				
Cultural Competence- Students will be able	Methods of assessment may include			
to report on Hispanic cultural practices,	presentations, written reports, quizzes, and/or			
language idiosyncrasies and social factors	exams			
that may affect the communication and/or				
the relationship between the health-				
practitioner and the patient.				

Course Outline including Time Allocation (current)

Торіс	Description	Time Allocation
Overview of the Medical/Healthcare Systems and cultural practices of Spanish- speaking countries	Students will learn about healthcare systems and cultural practices from Spanish-speaking countries and juxtapose that with the U.S. system. This includes topics such as socialized vs. privatized systems, western medicine vs traditional medicine, insurance, caregivers, amongst other related topics	9 hours
Overview of Latinos in the U.S. as it pertains to Healthcare	This course will cover statistics, issues, and realities about Latinos/Hispanics in the U.S., Midwest, and Michigan. The course will address where Latinos obtain information, what services are already available, what information is available in Spanish, special concerns with existing information and services in Spanish. Students will also contrast the cultural similarities and differences among Latin Americans, Latinos/Hispanics, and Anglos as it pertains to healthcare systems and practices.	9 hours
Health Care terminology	Students will practice vocabulary, dialogues, grammar concepts commonly used in the healthcare professions.	12 hours
Translation / Documents / Bilingualism	Takes into account existing documents the student will use in their profession and will address the best practices for translating documents for the healthcare professions into Spanish and vice versa. The course will also address issues of bilingualism from both the provider and recipient of these services.	9 hours
Formal Speaking / Field Experience	The students will have examples of Spanish-speaking professionals in their every day job. They will create role-plays that simulate the interactions according to their discipline. Students will observe Spanish-speaking professionals in their field (live or recorded) and they will present a report to the class.	6 hours

TOTAL TIME ALLOCATION: 45 hours total (assuming 3 contact hours/week)

CREATE NEW COURSE FORM F

Course Data Entry Form Rev. September 2012

COMPLETE ALL SECTIONS BELOW. If this course is to be used as a prerequisite for other university courses, Form F's that reflect the prerequisite change must be submitted for those courses as well. See Appendix E Instructions for Completing Forms.

I. ACTION TO BE TAKEN: CREATE A NEW COURSE

Desired Term Effective (201508): Examples: 201301(Spring), 201305(Summer), 201308(Fall) Note: The first four digits indicate year, the next two digits indicate month in which term begins.

II. NEW COURSE ATTRIBUTES:

n. Does proposed new course replace an equivalent course? Check (x Ves Ves No

o. Equivalent course: Prefix Number

p. CATALOG DESCRIPTION - Limit to 125 words - PLEASE BE CONCISE.

This course is designed for students in the medical field (nursing program, dental hygiene, optometry, pharmacy, etc.) who want to develop language-specific skills in this area. The main objective of the course is to provide health care providers with the necessary language skills to communicate more effectively with Spanish-speaking patients and to help them to provide better services to this community. In order to achieve these objectives, students will memorize dialogs and perform skits related to specific medical areas (e.g., assessing medical history and health risks, doctor-patient exams, etc.). Another important component of the course is the cultural readings that highlight Hispanic customs and traditions relevant to health care, as well as information on medical conditions and concerns affecting Latinos in the United States.

q. Term(s) Offered: Fall/Spring r. Max Section Enrollment: 28 Lecture: Lab:

s. Prerequisites or Restrictions: (If none, leave blank. Limit to 100 characters including punctuation and spaces.)

SPAN350 with a passing grade of C or better (proposed)

t. Co-requisites: courses must be taken concurrently (if none, leave blank. Limit to 100 characters including punctuation and spaces.)

To be completed by Academic Affairs Office: - Standard & Measures Coding and General Education Code

□ Basic Skill(BS) □ General Education (GE)	Occupational Education (OC)	G.E. Codes
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UCC Chair Signature/Date: Cle F-Z

Academic Affairs Approval Signature/Date:

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Office of the Registrar use ONLY

Date Rec'd:	Date Completed:	Entered: SCA	ACRSE S	CADETL	SCARRES	SCAPREQ

COURSE INFORMATION FORM

Complete all items below (New or Current).

Check all boxes where modifications are being made. Enter the modification to be made (Proposed).

Course Identification

 Prefix (proposed) SPAN
 Number (proposed) 432
 LEC _3 _ LAB _ _ SEM _ (current)

 (Enter Contact Hours per week)
 LEC _3 _ LAB _ _ SEM _ (proposed):

 Title (proposed) Span Social Services Outreach
 .

 .
 .

 Credit Hours (proposed) 3
 Prerequisites (proposed) SPAN 350 with a grade of C or better

□Course Description (proposed): (125 words maximum)

This course reinforces students' Spanish-language skills required when working with the Latino community through social services professions and outreach (social work, school teachers and counselors, lawyers, police officers, ministries, etc.). The course will cover a broad mix of social services contexts, while building the students' written and oral communication skills. In addition, emphasis will be placed on cultural issues that may affect successful interaction with Spanish-speaking individuals and families faced with matters concerning various policies and laws. Students will give oral and written reports dealing with social services issues and engage in field experiences with local Hispanic organizations providing social services to Spanish-speakers.

Course Outcomes and Assessment Plan (proposed)

SPAN 432: Spanish for Social Services and Outreach				
COURSE OUTCOMES:	MEANS OF ASSESSMENT:			
Cultural Competence- Students will be able to recall, in speech and in writing, the geography, customs, economy and society of different Spanish-speaking countries (Mexico, Central America, South America, the Caribbean, and Spain)	Methods of assessment may include written reports, exams, and/or quizzes			
Social Systems- Students will be able to compare and contrast social systems within Latin America, and in relation to the United States.	Methods of assessment may include written reports, presentations and/or final projects			
Conversation - Students will be able to initiate and sustain conversations in Spanish related to social services and outreach situations with the appropriate lexicon, expressions and terminology.	Methods of assessment may include oral exams, role plays, and/or oral interviews			
Formal Communication- Students will be able to demonstrate formal language abilities in spoken and written interactions.	Methods of assessment may include written reports, exams, oral interviews, role plays, and/or presentations			

Course Outline including Time Allocation (proposed)

Торіс	Description	Time Allocation
Overview of Latino Culture in the Midwest:	Includes an overview of the Spanish-speaking countries regions, history, demographics, and geography as it pertains to Social Service interactions. How the aforementioned affects present day politics, culture, and behavior. The students will contrast the cultural similarities and differences among Latino groups and Anglos.	12 hours
Reading and Comprehension	Students will read and present to the class articles in Spanish on topics related to their own discipline.	12 hours
Translation	Takes into account existing documents the student will use in their profession and will address the best practices for translating documents into Spanish and vice versa.	6 hours
Formal Speaking	The students will have examples of Spanish-speaking professionals in their every day job. They will create role-plays that simulate the interactions according to their discipline.	6 hours
Formal Writing	Class time will be devoted to introducing and illustrating the techniques needed to create the different documents they encounter in their profession.	6 hours
Field Experience	Students will observe Spanish-speaking professionals in their field and they will present a report to the class.	3 hours

TOTAL TIME ALLOCATION: 45 hours total (assuming 3 contact hours/week)

CREATE NEW COURSE

Course Data Entry Form

PROPOSED FORM F Rev. September 2012

COMPLETE ALL SECTIONS BELOW. If this course is to be used as a prerequisite for other university courses, Form F's that reflect the prerequisite change must be submitted for those courses as well. See Appendix E Instructions for Completing Forms.

I. ACTION TO BE TAKEN: CREATE A NEW COURSE

Desired Term Effective (6 digit code only): 201601

II. NEW COURSE ATTRIBUTES:

a. Course Prefix SPAN	b. Number 432	c. Contact Hours 3 [Enter hours per week in box. See for	⊠Lecture □LAB mula for contact hours to cre	☐Seminar edit hours in Appendix E.]	
d. Practicum [Check (x) box as appropriate.	Independent Study See definitions in A				
e. Course Title: Span Social S	Services Outreach	(Limit to 30 characters including pund	tuation and spaces.)		
f. College Code: AS g. Dep	partment Code: LAN	G h. Credit Hours: Check (x) type	Variable	⊠ Fixed	
i. Enter number in box: M If yes, Max Times or Max Cred		: _3_ j. Maximum Credit Hours _3_	k. May Be Repeated for Add	ded Credit: Check (x) 🛛 Yes	⊠No
I. Levels: Check (x) 🛛 🖾 Under	graduate ⊡Gra	duate			
m. Grade Method: Check (x)	⊠Normal Grading	Credit/No Credit (Pass/Fail)			
n. Does proposed new course	replace an equivalen	t course? Check (x) □Yes 🛛	No		
o. Equivalent course: Prefix	Number				
p. CATALOG DESCRIPTION-	- Limit to 125 words	- PLEASE BE CONCISE.			

This course reinforces students' Spanish-language skills required when working with the Latino community through social services professions and outreach (social work, school teachers and counselors, lawyers, police officers, ministries, etc.). The course will cover a broad mix of social services contexts, while building the students' written and oral communication skills. In addition, emphasis will be placed on cultural issues that may affect successful interaction with Spanish-speaking individuals and families faced with matters concerning various policies and laws. Students will give oral and written reports dealing with social services issues and engage in field experiences with local Hispanic organizations providing social services to Spanish-speakers.

q. Term(s) Offered: Spring
 r. Max Section Enrollment: 23
 Lecture: 28
 Lab:
 s. Prerequisites or Restrictions: SPAN 350 (Spanish and Culture for the Professions) with a grade of C or better.

t. Co-requisites: courses must be taken concurrently (if none, leave blank. Limit to 100 characters including punctuation and spaces.)

To be co	ompleted by Academic.	Affairs Office: - Standard & Mea	sures Coding and General	Education Code			·
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CREATE NEW COURSE

Course Data Entry Form

PROPOSED FORM F Rev. September 2012

COMPLETE ALL SECTIONS BELOW. If this course is to be used as a prerequisite for other university courses, Form F's that reflect the prerequisite change must be submitted for those courses as well. See Appendix E Instructions for Completing Forms.

I. ACTION TO BE TAKEN: CREATE A NEW COURSE

Desired Term Effective (6 digit code only): 201601

II. NEW COURSE ATTRIBUTES:

a. Course Prefix SPAN b. Number 491 c. Contact Hours 3 ☑THIS COURSE IN AN INTERNSHIP* (*Students will complete a minimum of 45 hours totai) [Enter hours per week in box. See formula for contact hours to credit hours in Appendix E.] d Practicum Independent Study [Check (x) box as appropriate. See definitions in Appendix E.] e. Course Title: Internship in Spanish f. College Code: AS g. Department Code: LANG h. Credit Hours: 3 Check (x) type I Fixed □Variable i. Enter number in box: Minimum Credit Hours: 3 i. Maximum Credit Hours: 3 k. May Be Repeated for Added Credit: Check (x): □ Yes ⊠No If yes, Max Times or Max Credits Awarded I. Levels: Check (x) ⊠ Undergraduate ⊠Graduate ⊡Professional m. Grade Method: Check (x) □Normal Grading Credit/No Credit (Pass/Fail) n. Does proposed new course replace an equivalent course? Check (x) □Yes ⊠No o. Equivalent course: Prefix Number p. CATALOG DESCRIPTION - Limit to 125 words - PLEASE BE CONCISE.

The Internship in Spanish provides students the opportunity to develop hands-on experience in occupational fluency and intercultural competencies in their non-Spanish primary or secondary area(s). Students will be required to meet with a faculty mentor who will approve and monitor the internship in a Spanish-speaking country. In some instances, students will be allowed to work in an organization or community that works closely with Spanish-speaking community in the U.S, in lieu of travelling abroad. In either case, the student will create a set of personal outcomes, and present a final portfolio that highlights the gained intercultural competencies and occupational fluency in the language. The Internship in Spanish is required for the completion of the B.S. degree in Spanish for the Professions.

q. Term(s) Offered: F, SP, SU r. Max Section Enrollment: 10 Lecture: X Lab:

s. Prerequisites or Restrictions: SPAN350 with a grade of a "C" or better and approval from the Spanish Internship Coordinator

t. Co-requisites: courses must be taken concurrently (if none, leave blank. Limit to 100 characters including punctuation and spaces.)

To be completed by Academic.	Affairs Office: - Standard & Measu	rres Coding and General Edu	cation Code			 ,
Basic Skill (BS)	General Education (GE)	Occupational Education (OC	C)	G.E	E. Codes	
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FORM E

COURSE INFORMATION FORM

	Rev. May 2013
Complete all items below (New or Current).	
Check all boxes where modifications are being made. Enter the modification to be made (Proposed).	
Course Identification	
□Prefix (proposed) SPAN □Number (proposed) 491	LEC LAB SEM (current)
	(Enter Contact Hours per week)
Title (proposed) Internship in Spanish	LEC <u>3*</u> LAB SEM(proposed): {*This is an internship course which requires a minimum of 45 hours)

□Credit Hours (proposed): 3 □Prerequisites (proposed): SPAN350 with a grade of a "C" or better and approval from the Spanish Internship Coordinator □Co-requisite (proposed) - NONE

Gourse Description (proposed): (125 words maximum)

The Internship in Spanish provides students the opportunity to develop hands-on experience in occupational fluency and intercultural competencies in their non-Spanish primary or secondary area(s). Students will be required to meet with a faculty mentor who will approve and monitor the internship in a Spanish-speaking country. In some instances, students will be allowed to work in an organization or community that works closely with Spanish-speaking community in the U.S, in lieu of travelling abroad. In either case, the student will create a set of personal outcomes, and present a final portfolio that highlights the gained intercultural competencies and occupational fluency in the language. The Internship in Spanish is required for the completion of the B.S. degree in Spanish for the Professions.

Course Outcomes and Assessment Plan (proposed)

SPAN 491: Internship in Spanish	
COURSE OUTCOMES: Cultural Competency- Students will be able to compare and to contrast national and regional variances that exist in Latin America and in Latino populations in the U.S.	MEANS OF ASSESSMENT: Methods of assessment will include a journal maintained during the internship that will take into account student's cultural experiences
Job Experience/Occupational Fluency- Students will be able provide evidence of occupationally appropriate translations, dialogues, and intercultural competencies, implement learned vocabulary, and integrate intercultural competencies while interacting with members of the Latino community and/or Spanish- speaking countries while participating in an on-the-job experience.	Methods of assessment will include a portfolio consisting of a final report on the internship, translations and common dialogues in Spanish in the student's non-Spanish primary or secondary area(s) (i.e. Nursing, Criminal Justice, Business and Social Work). Additional assessments in the portfolio will consist of job reports in the form of employer evaluations and/or reference letters

Topic:	Description:	Time Allocation:	
Portfolio Preparation	Students will focus on <u>five</u> areas for their independent, but mentored portfolio process by:	5 hours	
	Preparing samples of translations in the student's non-Sp secondary area (English-Spanish, Spanish-English)	anish primary or	
	Providing examples of technical writing in Spanish		
	 Demonstrating occupational Fluency in Spanish through dialogues (written) used in the student's non-Spanish prin area 		
	 Showing cultural competencies involving knowledge of Latinos and Latin Americans alike, especially as related to the student's non-Spanish primary or secondary area 		
	Submitting a report on cultural differences		
Internship (pre-departure and the internship itself)	Students will meet with their assigned mentor to set up the internship in a Spanish-speaking country, region, community, or organization. The mentor will guide the student in determining personal goals and objectives for the internship, as well as talk about expectations and evaluation criteria for the internship.	40 hours (min.)	

TOTAL TIME ALLOCATION: 45 hours minimum (assuming at least 3 contact hours/week)

CREATE NEW COURSE

Course Data Entry Form

PROPOSED FORM F Rev. September 2012

COMPLETE ALL SECTIONS BELOW. If this course is to be used as a prerequisite for other university courses, Form F's that reflect the prerequisite change must be submitted for those courses as well. See Appendix E Instructions for Completing Forms.

I. ACTION TO BE TAKEN: CREATE A NEW COURSE

Desired Term Effective (6 digit code only): 201601

II. NEW COURSE ATTRIBUTES:

a. Course Prefix SPAN b. Number 491 CTHIS COURSE IN AN INTERNSHIP* (*Students will complete a minimum of 45 hours total) c. Contact Hours 3 [Enter hours per week in box. See formula for contact hours to credit hours in Appendix E.] d. Practicum Independent Study [Check (x) box as appropriate. See definitions in Appendix E.] e. Course Title: Internship in Spanish f. College Code: AS g. Department Code: LANG h. Credit Hours: 3 Check (x) type ⊡Variable Fixed i. Enter number in box: Minimum Credit Hours: 3 j. Maximum Credit Hours: 3 k. May Be Repeated for Added Credit: Check (x): □ Yes ⊡No If yes, Max Times or Max Credits Awarded I. Levels: Check (x) G Undergraduate GGraduate □Professional m. Grade Method: Check (x) □Normal Grading □Credit/No Credit (Pass/Fail) n. Does proposed new course replace an equivalent course? Check (x) ⊡Yes ⊡No o. Equivalent course: Prefix Number p. CATALOG DESCRIPTION - Limit to 125 words - PLEASE BE CONCISE. The Internship in Spanish provides students the opportunity to develop hands-on experience in occupational fluency and intercultural competencies in

The internship in Spanish provides students the opportunity to develop hands-on experience in occupational fluency and intercultural competencies in their non-Spanish primary or secondary area(s). Students will be required to meet with a faculty mentor who will approve and monitor the internship in a Spanish-speaking country. In some instances, students will be allowed to work in an organization or community that works closely with Spanish-speaking community in the U.S, in lieu of travelling abroad. In either case, the student will create a set of personal outcomes, and present a final portfolio that highlights the gained intercultural competencies and occupational fluency in the language. The Internship in Spanish is required for the completion of the B.S. degree in Spanish for the Professions.

q. Term(s) Offered: F, SP, SU
r. Max Section Enrollment: 10 Lecture: X Lab:

s. Prerequisites or Restrictions: SPAN350 with a grade of a "C" or better and approval from the Spanish Internship Coordinator

t. Co-requisites: courses must be taken concurrently (if none, leave blank. Limit to 100 characters including punctuation and spaces.)

To be completed by Academic Affairs Office: - Stand	ard & Measures Coding and General Education Code	
Basic Skill (BS) General Education	(GE) Occupational Education (OC)	G.E. Codes
UCC Chair Signature/Date:		Academic Affairs Approval Signature/Date:
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Date Rec'd: Date Completed:	Entered: SCACRSE SCADETL	SCARRESSCAPREQ

COURSE INFORMATION FORM

Complete all items below (New or Current).

Check all boxes where modifications are being made. Enter the modification to be made (Proposed).

Course Identification

□Prefix (proposed) SPAN	ାNumber (proposed) 499 🖾 LEC LAB SE	M (current)
⊡Title (proposed) Senior Capst	one in Spanish	(Enter Contact Hours per week) LEC <u>2</u> LAB SEM(proposed):
⊡Credit Hours (proposed) 2	⊡Prerequisites (proposed)	Co-requisite (current) - NONE
	SPAN302, SPAN 491 and SPAN 430 Special Permission by Instructor	or SPAN 431 or SPAN432 with a passing grade of a "C" or higher, or

Course Description (proposed): (125 words maximum)

The Senior Capstone in Spanish is a required course for the fulfillment of the B.S. degree in Spanish for the Professions and is designed to highlight the students' achievement and application of the Spanish language and intercultural competencies in his/her primary or secondary area(s). In addition to the main course goals of demonstrating intercultural competencies and language proficiency in the professions, each student will create a set of personal outcomes to their specific career interests, and present the final portfolio to a committee of Spanish faculty. The goal of the Senior Capstone is to demonstrate how the courses, internship, and residency in a Spanish-speaking country abroad or with the Latino community in the U.S. helped to develop these intercultural competencies and occupational fluency in the language.

Course Outcomes and Assessment Plan (proposed)

SPAN 499: Senior Capstone	
COURSE OUTCOMES:	MEANS OF ASSESSMENT:
Occupational Fluency- Students will be	Methods of assessment will include an Exit
able to show accuracy in spoken and written	Exam in Spanish to test Occupational Fluency
Spanish as pertaining to formal interactions	(Based on vocabulary from one or more of the
in the student's primary and secondary	following areas: Business Spanish, Medical
area(s) of interest/vocation.	Spanish, or Spanish for Social Services and
	Outreach)
Competencies Connection- Students will be	Methods of evaluation will include a portfolio
able to provide evidence of occupationally	consisting of select final papers, projects,
appropriate translations, dialogues, and	translations and common dialogues in Spanish
intercultural competencies as a means of	in the student's non-Spanish primary or
demonstrating student's effectiveness in	secondary area, and a report that demonstrates
dealing with the local or international	cultural competency in the same area
Spanish-speaking populations.	

☑ Course Outline including Time Allocation (proposed)

Topic:	Description:	Time Allocation:	
Portfolio Preparation	Students will focus on five areas for their independent, but mentored portfolio process by: • preparing samples of translations in the student's non area (English-Spanish, Spanish-English) • providing examples of technical writing in Spanish • demonstrating occupational Fluency in Spanish throug dialogues (written) used in the student's non-Spanish • showing cultural competencies involving knowledge or alike, especially as related to the student's non-Spanish level. Students may include final papers or major report	gh a series of common primary or secondary area f Latinos and Latin Americans h primary or secondary area h courses at the 300- or 400-	
Portfolio Presentation	Students will present the portfolio and content in Spanish to the mentor and a committee comprised of two additional Spanish faculty members the last week of classes during the semester fo which the course is taken.		

TOTAL TIME ALLOCATION: 30 hours

CREATE NEW COURSE

Course Data Entry Form

PROPOSED

Rev. September 2012

COMPLETE ALL SECTIONS BELOW. If this course is to be used as a prerequisite for other university courses, Form F's that reflect the prerequisite change must be submitted for those courses as well. See Appendix E Instructions for Completing Forms.

I. ACTION TO BE TAKEN: CREATE A NEW COURSE

Desired Term Effective (6 digit code only): 201601

II. NEW COURSE ATTRIBUTES:

a. Course Prefix SPAN	b. Number 499	c. Contact Hours 2	⊠Lecture	□LAB □Seminar		
		[Enter hours per wee	ek in box. See	formula for contact hours to credit hours	in Appendix E.]	
d Practicum [Check (x) box as appropriate	<u> </u>	pendent Study ppendix E.]				
e. Course Title: Senior Caps	tone in Spanish					
f. College Code: AS g. Dep	partment Code: LAN	G h. Credit Hours:	2	Check (x) type	□Variable	⊠Fixed
-	Minimum Credit Hou Credits Awarded	ırs j. <u>2</u> Maximum	Credit Hours	k. May Be Repeated for Added Credit:	Check (x): □Yes	⊠No
I. Levels: Check (x) 🛛 🖾 Un	dergraduate 🗆 G	raduate DProfess	ional			
m. Grade Method: Check (x)	□Normal Gradin] 🛛 🖾 Credit/No Cr	edit (Pass/Fail)		
n. Does proposed new course	replace an equivale	nt course? Check (x)	⊡Yes	⊠No		
o. Equivalent course: Prefix	Number					
p. CATALOG DESCRIPTION	- Limit to 125 words	– PLEASE BE CONCI	SE.			

The Senior Capstone in Spanish is a required course for the fulfillment of the B.S. degree in Spanish for the Professions and is designed to highlight the students' achievement and application of the Spanish language and intercultural competencies in his/her primary or secondary area(s). In addition to the main course goals of demonstrating intercultural competencies and language proficiency in the professions, each student will create a set of personal outcomes to their specific career interests, and present the final portfolio to a committee of Spanish faculty. The goal of the Senior Capstone is to demonstrate how the courses, internship, and residency in a Spanish-speaking country abroad or with the Latino community in the U.S. helped to develop these intercultural competencies and occupational fluency in the language.

q. Term(s) Offered: SP	r. Max Section Enrollment: 23	Lecture: X	Lab:
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s. Prerequisites or Restrictions: SPAN 302, SPAN 491 and SPAN 430 or SPAN 431 or SPAN432 with a passing grade of a "C" or better, or Special Permission by Instructor

t. Co-requisites: courses must be taken concurrently (if none, leave blank. Limit to 100 characters including punctuation and spaces.)

To be completed by Academic /	Affairs Office: - Standard & Meas	ures Coding and General Ec	ducation Code		······································	
🔲 🛛 Basic Skill (BS) 🔲	General Education (GE)	Occupational Education (0C)	G.E	. Codes	
UCC Chair Signature/Date:		<u></u>		Academic Affairs	s Approval Signature/Date:	
De FZ	31/61/5				1_1	
		Office of the R ONI				
Date Rec'd:	Date Completed:Enter	red: SCACRSE	SCADETL	SCARRES	SCAPREQ	

Form G plus justification of the General Education designation being sought must be sent to the General Education Coordinator (preferably electronically). The criteria for each designation can be found FSU General Education website: http://www.ferris.edu/HTMLS/academics/gened/gened.html

Upon review, the form below will be completed by the University General Education Committee for the courses that will meet

General Education requirements. The form must be included in the proposal packet.

Course Prefix: SPAN Course Number: 350

Course Title: <u>Spanish and Culture for the Professions</u>	G. E. Codes Requested: G
G.E. Codes: G=Global Consciousness; R=Race/Ethnicity/Gender Issues; S=Social Awareness; C=Cultural Enrichment; W=Writing Intensive; Z=Scientific Understanding; ZL=Scientific Understanding (Lab)	
Initiator: Ana Dávila-Howard, Eric Warner, Gustavo Rodríguez-Morán, Lu 11/06/2014	icero Flores-Páez, Kristin Oplinger Date Sent:
Proposal Contact: Eric Warner Email: warnere3@ferris.edu	
Department: Languages and Literature Campus Address: ASC30	

University General Education Committee: $\underline{\times}$ Chair: $\underline{\sim}$ Date Returned: $\underline{3/26/15}$	CHELL

Based upon University General Education Committee review on 3/24/18, we

Support the request to designate the course listed above as a <u><u>C</u>(insert Gen. Ed. Designation(s).)</u>

Do not support the request to designate the course listed above as a _____(insert Gen. Ed. Designation(s) for reasons listed below.

Comments:

¥

Form G plus justification of the General Education designation being sought must be sent to the General Education Coordinator (preferably electronically). The criteria for each designation can be found FSU General Education website: http://www.ferris.edu/HTMLS/academics/gened/gened.html

Upon review, the form below will be completed by the University General Education Committee for the courses that will meet

General Education requirements. The form must be included in the proposal packet.

Course Prefix: SPAN Course Number: 350

Course Title: Spanish and Culture for the Professions

G. E. Codes Requested: <u>C</u>

G.E. Codes: G=Global Consciousness; R=Race/Ethnicity/Gender Issues; S=Social Awareness; C=Cultural Enrichment; W=Writing Intensive; Z=Scientific Understanding: ZL=Scientific Understanding (Lab)

Initiator: Ana Dávila-Howard, Eric Warner, Gustavo Rodríguez-Morán, Lucero Flores-Páez, Kristin Oplinger Date Sent: 11/06/2014

Proposal Contact: Eric Warner Email: warnere3@ferris.edu

Department: Languages and Literature Campus Address: ASC3080

Please Print

University General Education Committee: 🔀 Stopl Chair: $\underline{\mathcal{K}}$ Date Returned: $\underline{3/2} \underline{\mathcal{L}}/15$

Based upon University General Education Committee review on 3/24/15 (date), we

Support the request to designate the course listed above as a _____(insert Gen. Ed. Designation(s).)

Do not support the request to designate the course listed above as a _____(insert Gen. Ed. Designation(s) for reasons listed below.

Comments:

M

Form G plus justification of the General Education designation being sought must be sent to the General Education Coordinator (preferably electronically). The criteria for each designation can be found FSU General Education website: http://www.ferris.edu/HTMLS/academics/gened/gened.html

Upon review, the form below will be completed by the University General Education Committee for the courses that will meet General Education requirements. The form must be included in the present resture.

General Education requirements. The form must be included in the proposal packet.

Course Prefix: SPAN Course Number: 430

Course Title: BUSINESS SPANISH G. E. Codes Requested: C

G.E. Codes: G=Global Consciousness; R=Race/Ethnicity/Gender Issues; S=Social Awareness; C=Cultural Enrichment; W=Writing Intensive; Z=Scientific Onderstanding; ZL=Scientific Onderstanding (Lab)

Initiator: Ana Dávila-Howard, Eric Warner, Gustavo Rodríguez-Morán, Lucero Flores-Páez, Kristin Oplinger Date Sent: 11/06/2014

Proposal Contact: Eric Warner Email: warnere3@ferris.edu

Department: Languages and Literature Campus Address: ASC3080

University General Education Committee: X Chair: K Date Returned: 3/21/15

Based upon University General Education Committee review on $\frac{3/24}{4}$ (date), we

Support the request to designate the course listed above as a <u>(()</u>) (insert Gen. Ed. Designation(s).)</u>

Do not support the request to designate the course listed above as a _____(insert Gen. Ed. Designation(s) for reasons listed below.

Comments:

 $\mathbf{\nabla}$

Form G plus justification of the General Education designation being sought must be sent to the General Education Coordinator (preferably electronically). The criteria for each designation can be found FSU General Education website: http://www.ferris.edu/HTMLS/academics/gened/gened.html

Upon review, the form below will be completed by the University General Education Committee for the courses that will meet

General Education requirements. The form must be included in the proposal packet.

Course Prefix: SPAN Course Number: 430

Course Title: BUSINESS SPANISH G. E. Codes Requested: G

G.E. Codes: G=Global Consciousness; R=Race/Ethnicity/Gender Issues; S=Social Awareness; C=Cultural Enrichment; W=Writing Intensive; Z=Scientific Understanding; ZL=Scientinc Understanding (Lab)

Initiator: Ana Dávila-Howard, Eric Warner, Gustavo Rodríguez-Morán, Lucero Flores-Páez, Kristin Oplinger Date Sent: 11/06/2014____

Proposal Contact: Eric Warner Email: warnere3@ferris.edu

Department: Languages and Literature Campus Address: ASC3080

University General Education Committee: 🚫 Chair: X Date Returned: 3/24/15

Based upon University General Education Committee review on 3/24/15, we

Support the request to designate the course listed above as a <u></u>(insert Gen. Ed. Designation(s).)

Do not support the request to designate the course listed above as a _____(insert Gen. Ed. Designation(s) for reasons listed below.

Comments:

Form G plus justification of the General Education designation being sought must be sent to the General Education Coordinator (preferably electronically). The criteria for each designation can be found FSU General Education website: http://www.ferris.edu/HTMLS/academics/gened/gened.html

Upon review, the form below will be completed by the University General Education Committee for the courses that will meet General Education requirements. The form must be included in the proposal packet.

Course Prefix: <u>SPAN</u> Course Number: 431

Course Title: Spanish for Health Professions G. E. Codes Requested: C

G.E. Codes: G=Global Consciousness; R=Race/Ethnicity/Gender Issues; S=Social Awareness; C=Cultural Enrichment; W=Writing Intensive; Z=Scientific Understanding; ZL=Scientific Understanding (Lab) Initiator: <u>Ana Dávila-Howard, Eric Warner, Gustavo Rodríguez-Morán, Lucero Flores-Páez, Kristin Oplinger</u> Date Sent: <u>11/06/2014</u> Proposal Contact: <u>Eric Warner</u> Email: <u>warnere3@ferris.edu</u> Department: <u>Languages and Literature</u> Campus Address: <u>ASC3080</u>

	University General Education Committee: X Chair: K Date Returned: 3/26/15	
E	Based upon University General Education Committee review on $\frac{3/24}{(tate)}$, we	
	Support the request to designate the course listed above as a <u>(insert Gen. Ed. Designation(s)</u> .)	

Do not support the request to designate the course listed above as a <u>(insert Gen. Ed.</u> Designation(s) for reasons listed below.

Comments:

Form G plus justification of the General Education designation being sought must be sent to the General Education Coordinator (preferably electronically). The criteria for each designation can be found FSU General Education website: http://www.ferris.edu/HTMLS/academics/gened/gened.html

Upon review, the form below will be completed by the University General Education Committee for the courses that will meet General Education requirements. The form must be included in the proposal packet.

Course Prefix: <u>SPAN</u> Course Number: 431

Course Title: Medical Spanish G. E. Codes Requested: G

G.E. Codes: G=Global Consciousness; R=Race/Ethnicity/Gender Issues; S=Social Awareness; C=Cultural Enrichment; W=Writing Intensive; Z=Scientific Understanding; ZL=Scientific Understanding (Lab) Initiator: <u>Ana Dávila-Howard, Eric Warner, Gustavo Rodríguez-Morán, Lucero Flores-Páez, Kristin Oplinger</u> Date Sent: <u>11/06/2014</u> Proposal Contact: <u>Eric Warner</u> Email: <u>warnere3@ferris.edu</u> Department: <u>Languages and Literature</u> Campus Address: <u>ASC3080</u>

	University General Education Committee: X CHIU Chair: CDate Returned: 3/26/15 CHIU
	Based upon University General Education Committee review on 2/24/15
X.	Support the request to designate the course listed above as a <u><u>f</u> (insert Gen. Ed. Designation(s).)</u>
	Do not support the request to designate the course listed above as a <u>(insert Gen. Ed.</u> Designation(s) for reasons listed below.
	Comments:

Form G plus justification of the General Education designation being sought must be sent to the General Education Coordinator (preferably electronically). The criteria for each designation can be found FSU General Education website: http://www.ferris.edu/HTMLS/academics/gened/gened.html

Upon review, the form below will be completed by the University General Education Committee for the courses that will meet General Education requirements. The form must be included in the proposal packet.

Course Prefix: SPAN Course Number: 432

Course Title: Spanish for Social Services and Outreach G. E. Codes Requested: C

Awareness; C=Cu	iness; R=Race/Ethnicity/Gender Issues; S=Social Ifural Enrichment; W=Writing Intensive; Z=Scientific I =Scientific Understanding (Lab)
Initiator: <u>Ana Dávila-Howar</u> 11/06/2014	d, Eric Warner, Gustavo Rodríguez-Morán, Lucero Flores-Páez, Kristin Oplinger Date Sent:
Proposal Contact: Eric Wa	rnerEmail: warnere3@ferris.edu
Department: <u>Languages a</u>	nd Literature Campus Address: ASC3080

	University General Education Committee: X Chair: X_Date Returned: 3/26/15
	Based upon University General Education Committee review on(date), we
\mathbb{X}	Support the request to designate the course listed above as a <u>(insert Gen. Ed. Designation(s)</u> .)
	Do not support the request to designate the course listed above as a <u>(insert Gen. Ed.</u> Designation(s) for reasons listed below.
	Comments:

Form G plus justification of the General Education designation being sought must be sent to the General Education Coordinator (preferably electronically). The criteria for each designation can be found FSU General Education website: http://www.ferris.edu/HTMLS/academics/gened/gened.html

Upon review, the form below will be completed by the University General Education Committee for the courses that will meet

General Education requirements. The form must be included in the proposal packet.

Course Prefix: SPAN Course Number: 432

Course Title: Spanish for Social Services and Outreach G. E. Codes Requested: G

G.E	. Codes: G=Global Consciousness; R=Race/Ethnicity/Gender Issues; S=Social Awareness; C=Cultural Enrichment; W=Writing Intensive; Z=Scientific Understanding; ZL=Scientific Understanding (Lab)
lni <u>11</u>	tiator: <u>Ana Dávila-Howard, Eric Warner, Gustavo Rodríguez-Morán, Lucero Flores-Páez, Kristin Oplinger</u> Date Sent: /06/2014
Pro	oposal Contact: Eric Warner Email: warnere3@ferris.edu
De	partment: Languages and Literature Campus Address: <u>ASC3080</u>

Chair: \times Date Returned: 3/24/15 CHSUR Based upon University General Education Committee review on 2/24/15 (date), we

Support the request to designate the course listed above as a <u>____(insert Gen. Ed. Designation(s).</u>)

Do not support the request to designate the course listed above as a _____(insert Gen, Ed. Designation(s) for reasons listed below.

Comments:

X

FORM FIN

To be completed by the Director of Financial Aid (DFA). The DFA must return the original form to the Academic Senate Office to be inserted in the proposal and a copy to the initiator. The DFA must respond within 10 business days of receipt of this form to insure that the form is included in the final proposal.

Failure to respond by 10 business days of receipt of this form is interpreted as support for the

proposal. RE: Proposal Title: Bachelor of Science in Spanish for the Professions

Initiator: <u>Ana Dávila-Howard, Er</u>	ric Warner, Gustavo Rodriguez-Mo	án, Lucero Flores-Páez, H	Kristin Oplinger	Date Sent: 01/28/2015

1 Dec

Proposal Contact: Eric Warner Email: warnere3@ferris.edu

Department: Languages & Literature

Campus Address: ASC 3080

Date 3-10-15

Director of Financial Aid Signature:

Returned:_____

Please check all that apply:

- The new program is remedial as it prepares students for study at the postsecondary level. This program is not an eligible program per Federal requirements; therefore students in this program are not eligible to receive financial aid.
- The new program is considered a preparatory program as it prepares a student for a given program, i.e., they do not meet the academic criteria to be admitted into the program. Student is only eligible for Federal Direct Loans for one year.
- The new program is a certificate program. Certificate programs are not eligible programs per Federal requirements; therefore students in this program are not eligible to receive financial aid.
- The new program is a teacher certification program where it provides coursework required for a professional State credential necessary for employment as an elementary or secondary school teacher, but for which the institution awards no academic credential. <u>Students</u> are eligible for Federal Direct Loans only at an undergraduate level.
- The new program is a teacher certification program that will award a certificate credential. Certificate programs are not eligible program per Federal requirements; therefore students in this program are not eligible to receive financial aid.
- The new program is a Bachelor Completion program; a two-year degree completion program that requires an associate degree or the successful completion of at least two years of college coursework as a prerequisite for admission. These are aid eligible programs and students may receive financial aid.
- The new program is a Master's, Professional, or Doctoral Degree/Major program that allows students to take some undergraduate courses where some deficiency exists. Please note, students are eligible to receive Federal loans for the program, but undergraduate courses will not be included in the total credit count to determine loan eligibility. Students must be half time (Graduate/Professional = 5 credits, Doctoral = 3 credits) in graduate level courses to receive Federal aid.
 - The new program is an Associate's, Bachelor's, Master's, Professional, or Doctoral Degree/Major and is conferred upon graduation Per Federal requirements, these are aid eligible programs and students may receive financial aid.

Please include the number of credit hours to earn the degree or credential being sought. This is required as it must be reported to the Department of Education as well as the National Student Loan Clearinghouse, regardless if students are receiving federal aid.

Credits Required to Earn	121
Degree: Revised 4/30/14 sd	

From:	Olukemi O Fadayomi
Sent:	Wednesday, March 04, 2015 4:12 PM
То:	Eric J Warner
Cc:	Debra K Courtright-Nash; Adnan Dakkuri; Brian Holton; David M Marion; Elise M
	Gramza; John Scott S Gray; Kristy L Motz; Mark A Hutchinson; Olukemi O Fadayomi;
	Paul Blake; Paula L Hadley-Kennedy; Tracey D Boncher; Victor I Piercey
Subject:	Proposal #15-055

UCC reviewed your B.S in Spanish for the Professions proposal, Proposal #15-055 on Monday, March 2 and we are holding it pending the receipt of additional information.

We noticed that h, l, m, n and k on the **Form Fs** are not complete. We ask that you forward completed forms to Paula by 12:00 noon on Wednesday, March 11, so that she can make it available to committee members before Monday's meeting.

In regards to the changes suggested by the Dean's office, we recommend the inclusion of the statement, "Students entering below a 300 level are recommended to take 102,201, and 202 as general education electives" since most students use the checksheet as an advising tool before meeting with their advisors. We will forward our recommendation to Dr. Karafa in the Dean's office.

The committee asks that you and/or a representative attend the UCC meeting on Monday, March 16 at 12:20 pm in CSS 302 to answer questions about this proposal.

Do not hesitate to contact me if I can be of further assistance. Hope to see you soon.

Kemi . Olukemi Fadayomi, Ph. D Professor Department of Biological Sciences Ferris State University ASC 2009, 820 Campus Drive Big Rapids, MI 49307-2225

fadayok@ferris.edu Phone: (231) 591-5628 Fax: (231) 591-2540

From: Sent: To: Cc: Subject: Olukemi O Fadayomi Wednesday, March 04, 2015 4:24 PM Eric J Warner Debra K Courtright-Nash; Paula L Hadley-Kennedy One more thing!

Eric,

I forgot to mention that our meeting is from 12:00 - 12:50 pm but you're on our agenda for 12:20 pm. You may join us anytime between 12 and 12:20 pm. Thanks

-

Kemi Olukemi Fadayomi, Ph. D Professor Department of Biological Sciences Ferris State University ASC 2009, 820 Campus Drive Big Rapids, MI 49307-2225

fadayok@ferris.edu Phone: (231) 591-5628 Fax: (231) 591-2540

From:	Andy A Karafa
Sent:	Thursday, March 05, 2015 10:31 AM
То:	Olukemi O Fadayomi
Cc:	Adnan Dakkuri; Brian Holton; David M Marion; Elise M Gramza; John Scott S Gray; Kristy
	L Motz; Mark A Hutchinson; Paul Blake; Paula L Hadley-Kennedy; Tracey D Boncher;
	Victor I Piercey; Debra K Courtright-Nash; Eric J Warner
Subject:	Re: Spanish for the Professions B.S.

Kemi,

I am not opposed to the inclusion of the recommended language. I agree that this information should be found on a checksheet for the reasons you share. My concern is that it does not, necessarily, belong under the heading "Graduation Requirements." This implies something more than a recommendation.

Regarding MyDegree, it might best serve as an example. (The College of Arts and Sciences has struggled with inaccurate information about our program requirements, leading to advising challenges.) Essentially, the College cannot always control how information on our checksheets is used (e.g., websites); so, I want to avoid listing anything as a "graduation requirement" that is not, truly, a requirement.

Andy

J. Andy Karafa, Ph.D. Associate Dean, Arts & Sciences Interim Academic Department Head, Mathematics

ASC 3052 Ferris State University Big Rapids, MI 49307 (231) 591-3665 (office) (800) 4-FERRIS (231) 591-2541 (FAX)

From: Olukemi O Fadayomi <<u>OlukemiFadayomi@ferris.edu</u>> Date: Wed, 4 Mar 2015 16:39:35 -0500

To: Andy A Karafa <<u>AndyKarafa@ferris.edu</u>>

Cc: Adnan Dakkuri <<u>AdnanDakkuri@ferris.edu</u>>, Brian Holton <<u>BrianHolton@ferris.edu</u>>, David M Marion <<u>DavidMarion@ferris.edu</u>>, Elise M Gramza <<u>EliseGramza@ferris.edu</u>>, John Scott S Gray <<u>JohnScottGray@ferris.edu</u>>, Kristy L Motz <<u>KristyMotz@ferris.edu</u>>, Mark A Hutchinson <<u>MarkHutchinson@ferris.edu</u>>, Olukemi O Fadayomi <<u>OlukemiFadayomi@ferris.edu</u>>, Paul Blake <<u>PaulBlake@ferris.edu</u>>, Paula L Hadley-Kennedy <<u>PaulaHadley-Kennedy@ferris.edu</u>>, Tracey D Boncher <<u>TraceyBoncher@ferris.edu</u>>, Victor I Piercey <<u>VictorPiercey@ferris.edu</u>> Subject: Spanish for the Professions B.S.

Hi Andy,

In response to your "caveats" for supporting the BS Spanish for Professions proposal, our committee is recommending the inclusion of the statement, "Students entering below a 300 level are recommended to take 102,201, and 202 as general education electives" in the checksheet. We noticed that you struck it out of the proposal. It is our experience that students use the checksheet as their first line of advising before meeting with their advisors, as such the more information available to them on the checksheet, the better it is for them to plan their schedule. Moreover, we found no evidence that its inclusion will pose any problem for entering information into MyDegree.

We have contacted the proposers with our recommendations.

Kemi Olukemi Fadayomi, Ph. D Professor Department of Biological Sciences Ferris State University ASC 2009, 820 Campus Drive Big Rapids, MI 49307-2225

fadayok@ferris.edu

Phone: (231) 591-5628 Fax: (231) 591-2540

From:	Olukemi O Fadayomi
Sent:	Tuesday, March 17, 2015 12:27 PM
То:	Eric J Warner; Debra K Courtright-Nash
Cc:	Adnan Dakkuri; Brian Holton; David M Marion; Elise M Gramza; John Scott S Gray; Kristy
	L Motz; Mark A Hutchinson; Olukemi O Fadayomi; Paul Blake; Paula L Hadley-Kennedy;
	Tracey D Boncher; Victor I Piercey
Subject:	Proposal #15-055

Hi Eric,

Your proposal Bachelor of Science in Spanish for the Professions, Proposal #15-055 was approved by the UCC at our meeting Monday, March 16.

Your proposal has been forwarded to the Academic Senate for discussion and approval at the next meeting. So, the next step is for you to have a representative attend the Senate meeting on Tuesday, April 7 from 10:00 - 11:45 AM in University Center 202 C to answer questions about this proposal. Congratulations!

Kemi Olukemi Fadayomi, Ph. D Professor Department of Biological Sciences Ferris State University ASC 2009, 820 Campus Drive Big Rapids, MI 49307-2225

fadayok@ferris.edu Phone: (231) 591-5628 Fax: (231) 591-2540

ACADEMIC SENATORS 2015-2016

	College/Unit	Last Name	First Name	Office	Ext.	Committee Assignment
1.	Allied Health	Epps	Antionette (2)	VFS 409	2266	
2.		Zyla	Emily (2)	VFS 318	2275	
3.		Wancour	Susan (1)	VFS 312	2398	Senate E-board, Policy & Standards
4.	Arts & Sciences	Alspach	Sandra (2)	JOH 127	2779	UCC/Athletic Advisory Committee
5.		Berghoef	Michael (2)	ASC 2108	2765	Past President Gen Ed Task Force
6.		Gray	John Scott (2)	JH 119	3515	
7.		Piercey	Victor (2)	ASC 2021	2823	University Curriculum Committee, E-board Member
8.		Bacon	Charles (2)	ASC 3019	2586	Student Life Committee, Senate Vice President
9.		Foulk	Rachel (2)	JH 124	2776	
10.		Klatt	Paul (1)	ASC 2004	2671	Faculty Research Committee
11.		Zimmer	Beth (2)	ASC 2120	5022	
12.		Balanda	Peter (1)	ASC 3012	5870	
13.		Daubert	Daisy (1)	ASC 2012	2554	Professional Development Committee
14.		Fadayomi	Kemi (1)	ASC 2009	5628	University Curriculum Committee
15.	Business	Mattis	Ted (2)	BUS 343	2766	
16.		Fagerman	Anita (1)	IRC 212K	3162	Graduate and Professional Council
17.		Bajor	Larry (2)	IRC 212B	3153	
18.		Briggs	Lianne (2)	WCO 106	2384	
19.		Cronk	Dan (2)	BUS 124C	3053	
20.	Counselors/	Richmond	Christopher (1)	BHC 210	5968	Faculty Research Committee
21.	Librarians	Isler	Melinda (2)	FLT 358	3731	Senate E-board, University Grad & Professional Council
22.	Education	Lewis	Russell (2)	BIS 514	3581	
23.		Wagenheim	Matt (1)	BIS 612	2670	Academic Program Review Council
24.	Optometry	Jenerou	Alison (2)	MCO 231	2179	Athletic Advisory Committee
25.		Dinardo	Amy (1)	MCO 231	2202	Senate E-board
26.	Non-tenure Track Inst. Faculty (Fall Election)	Fox	Bernadette (1)	ASC 3025	2522	Arts and Lectures Committee
27.		Bacon	Mary (1)	ASC 3019	2586	
28.	Pharmacy	Baran	Rose (1)	PHR G	616-643-1134	Student Life Committee
29.		Hancock	Kim (2)	PHR 301	2234	
30.		Bright	David (2)	PHR 202B	2231	
31.	Engineering Technology	Drake	Chuck (1)	SWN 405	2788	
32.		Hanna	David (1)	GRN 227	2680	Distinguished Teacher Committee
33.		Rumpf	Jim (2)	SWN 108	3591	Arts and Lectures Committee
34.		Thapa	Khagendra (2)	SWN 314	2672	Senate President
35.		Todd	Gareth (1)	JOH 309	5041	Academic Program Review Council
36.		Siahpush	Ali (1)	JOH 418	2062	Professional Development Committee
37.	EIO	Brecken	Don (1)	FSU-GR	616-451-4777	University Curriculum Committee

BOLD indicates Senate Officer