

Academic Senate
Revised Agenda for the Meeting of
February 2, 2010
West Campus Community Center
10:00 am

1. Call to Order
 2. Approval of Minutes
 - A. January 12, 2010
 3. Open Forum
 4. Reports
 - A. Senate President – Richard Griffin
 - B. Senate Vice President – Michael Berghoef
 - C. Senate Secretary – Sandy Alspach
 5. Committee Reports
 - A. General Education Task Force – Don Flickinger
 - B. HLC Update – Robbie Teahen
 - C. University Curriculum Committee – Leonard Johnson
- Roll Call**
6. Old Business
 - A. Standing Committee to Maintain and Review the Senate Charter (“Rules” Committee) – Sandy Alspach
 7. New Business
 - A. New Degree – BS Molecular Diagnostics – Elaine Straley
 - B. New Degree – AAS Dietary and Food Service Management – Julie Doyle
 - C. New Minor – Surveying and Mapping – Sayed Hashimi
 - D. General Education Philosophy Statement – Fred Heck
 8. Announcements
 - A. FSU President - David Eisler
 - B. Provost – Fritz Erickson
 - C. Senate President – Richard Griffin
 9. Open Forum
 10. Adjournment

DRAFT
Ferris State University
Academic Senate Meeting
January 12, 2010
West Campus Community Center

Minutes

I.	Action Items	
	A.	Moved (Sen. Haneline), seconded (Sen. Sanderson) and passed unanimously to approve the minutes of the December 8, 2009 meeting. Attendance will be updated before posting.
	B.	Moved (Sen. Haneline), seconded (Sen. Klatt) and passed unanimously to endorse the General Recommendations of the Academic Program Review Council.
Charter Revision Recommendations were deliberated, with the following revisions to the Charter earning Senate support.		
	C.	Moved (Sen. Isler), seconded (Sen. Sanderson) and passed on voice vote to accept the addition to Article VIII, Organization and Procedure, Section 4 of the Academic Charter as follows: "At large members shall be elected by plurality vote on a single ballot with the opportunity to vote for three (3) members. In the event of a tie, there will be a re-vote of the tied candidates."
	D.	Moved (Sen. Rewer), seconded (Sen. Isler) and passed unanimously to amend Article VIII – Organization and Procedure, renumbering beginning with Section 5 through Section 15 as follows: Section 5. In the event a position on the Executive Committee, other than the position of president, becomes vacant, a replacement shall be elected by the Senate at the next regular meeting, such meeting being presided over by the President or the highest-ranking continuing officer. The succession plan for a mid-term vacated President’s position is described in Article V, Section 3. Section 6. Regular meetings of the Senate shall be held each month during the fall and spring semesters of the academic year at such time and place as is determined by the Executive Committee. The President, in consultation with the Executive Committee, shall call additional meetings during summer and semester breaks as are necessary to fulfill Senate responsibilities and functions. The Senate may authorize its Executive Committee to fulfill these obligations. Section 7. The President may call for special meetings of the Senate, and shall also call for such meetings at the direction of the Executive Committee, or in response to a petition by one-third (1/3) of the Senate membership. Members shall receive an advance notice of a special meeting of at least twenty-four (24) hours. Section 8. Special meetings shall not be called in lieu of a regular meeting nor shall regular meetings be designated as special meetings. Section 9. The quorum necessary for the conduct of business by the Senate shall be a majority of the members of the Senate, and at least one (1) member from each of the majority of the units defined in Article III, Section 1. Formal action of the Senate shall be determined by a majority vote. Section 10. In the event that a decision of the President of the University and a recommendation of the Senate are in conflict regarding a policy, priority, procedure, curriculum, or activity governed by this Charter and requiring Board of Trustees approval, a Conference Committee comprised of three persons appointed by the President of the

University and three members of the Senate appointed by the Executive Committee of the Senate shall be formed. This Conference Committee shall meet in a timely fashion, solely to resolve the specific issue in dispute and report the results of its deliberations to the President of the University and to the Senate. Conference Committee Process:

1. The Senate Executive Board and the office of the President of the University will have ten (10) working days to select the Conference Committee members.
2. After appointment the Conference Committee will have five (5) working days to meet, discuss and report the results of their deliberations to the President and the Academic Senate.
3. At the first meeting of the Conference Committee both the President of the University or a designee and the President of the Senate or a designee, will be present to give the charge to the committee.
4. The Conference Committee will select a spokesperson at the first meeting.
5. At the conclusion of their deliberations the Conference Committee spokesperson will provide the President of the University and the President of the Academic Senate a written report of their deliberations.
6. The Academic Senate will meet to vote on endorsement of the report within ten (10) working days of its release.
7. If the Senate does not endorse the Conference Committee Report the Senate Executive Committee will prepare a Senate position paper to be approved by the Senate within ten (10) working days.
8. The President of the University will provide the Senate position paper to the Board of Trustees Academic Subcommittee at their next meeting.
9. The Academic Senate President and other Executive Committee members will attend the Board of Trustees Academic Subcommittee meeting to address the issues provided in the position paper.
10. The Academic Senate President will be present at the Ferris State University Board of Trustees meeting where the vote on the issue at hand is held. The Academic Senate President will present the views of the Senate as an agenda item prior to the vote.

Section 11. Whenever any resolution, recommendation, opinion, or report adopted by the Senate is submitted to the President of the University, any member who is in disagreement may submit a minority recommendation, opinion, or report to the President of the University. The President of the Senate shall be provided with a copy of the minority action by its sponsor and shall disseminate the document to the Senate.

Section 12. Any College, department, Senate committee, representative unit as defined in Article III, Section 1, or the President of the University may recommend matters to be considered by the Senate. When a matter is so recommended, it shall be referred to the Executive Committee.

Section 13. Any member of the Senate may on personal initiative present a motion at a Senate meeting that a matter be placed on the agenda. If the motion is passed by the Senate, the matter shall be placed on the agenda for discussion and disposition at the next regular Senate meeting.

	<p>Section 14. All records of the Senate enumerated in Article V, Section 4, shall be open to any member of the representative units, and in no manner shall the records of the Senate be considered private.</p> <p>Section 15. Except when superseded by this Charter or by special rules adopted by the Senate, the rules of parliamentary law as contained in the most recent edition of <i>Robert's Rules of Order, Newly Revised</i> shall govern the conduct of meetings of the Senate and Senate committees. In order to facilitate this process at Senate meetings, a Parliamentarian shall be appointed by the Executive Committee following the organizational meeting.</p>
E.	<p>Moved (Sen. Rewers), seconded (Sen. Isler) and passed with one nay to amend Article IX, Senate Committees, as follows:</p> <p style="text-align: center;">ARTICLE IX – SENATE COMMITTEES</p> <p>Section 1. It shall be the function of the Executive Committee to appoint the faculty members of all Senate committees, subject to the requirements of state and federal regulatory bodies or law. All electors of the representative units shall be eligible to serve on such committees. Committee membership should be representative of a majority of the units, with no one unit having majority of membership, comprising the Senate, unless such representation is incompatible with the function of the committee. Ex-officio members will be assigned as needed.</p> <p>Section 2. The Senate shall determine the composition, mission, and function of each committee. The Senate shall supervise the activities of these committees and determine changes in the composition, mission, and function.</p> <p>Section 3. At the beginning of each academic year, the members of each committee will elect a chair for that year.</p> <p>Section 4. Reports of all committees shall be transmitted to the Secretary of the Senate. The President of the Senate will transmit the reports to the President of the University and other appropriate offices.</p> <p>Section 5. All requests for changes in composition, mission, or function of any committee established under provisions of this Article shall be submitted to the Senate for its approval.</p> <p>Section 6. There shall be an elections committee as defined in Article IV, Section 2.</p>
F.	<p>Moved (Sen. Rewers), seconded (Sen. Isler) and passed unanimously to amend Article X, Amendment, Section 1, as follows:</p> <p style="text-align: center;">ARTICLE X - AMENDMENT</p> <p>Section 1. Proposals to amend this Charter may be submitted to the Senate by any of its members or by a resolution adopted by a majority of the members of any representative unit defined in Article III, Section 1. With the approval of the Senate, the proposed amendment shall be placed upon the agenda for consideration at the next regular meeting. If the proposed amendment is adopted by the Senate, it shall be submitted in a referendum to the eligible electors as defined in Article IV, Section 12. If the amendment is approved in the referendum, it shall become a part of this Charter, subject to the approval of the Board of Trustees.</p>
G.	<p>Moved (Sen. Rewers), seconded (Sen. Isler) and passed unanimously to separate the Policy and Procedures from the Charter.</p>
H.	<p>A motion by Sen. Alspach, seconded by Sen. Berghoef, to create a Standing Charter and Procedures Review Committee was postponed to the February meeting.</p>
I.	<p>A motion by Sen. Prakasam, seconded by Sen. Topcu, to recommend inserting the term</p>

		'globalized' into the General Education Philosophy statement was tabled to the February meeting.
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II.	Open Forum	
	A.	Sen. Haneline asked for a show of hands from Senators who used Facebook or LinkedIn networking websites. He observed that the institution continues to encourage development of online instruction. He shared a conversation in which he had learned that the largest growth in users of social media is in the age demographic of 45 or older. He opined that the Senate as a unit should investigate how to use these tools.
	B.	Michael Wade, assistant director of the Office of Multicultural Student Services, encouraged Senators and their students to attend events scheduled during the upcoming Martin Luther King Jr. Celebration Week. He distributed an invitation letter and a flyer of the events. He emphasized that this year's celebration aims to focus on ways to get involved in expanding inclusion in America since the Jim Crow era of racial segregation. Participants will be encouraged to donate nonperishable food and personal needs items at several locations around campus.
		Guest Fred Heck asked if there would be sign-in sheets for classes at the event locations. Mr. Wade agreed to arrange it.

III.	Officer Reports	
	A.	President Griffin reported on Paula Hadley's recuperation from surgery, noting that "we don't realize how much she does for us until we have to do it alone."
		1. He announced that Sen. Kim Beistle has agreed to chair the Elections Committee. She would be working with the Executive Committee to populate her committee in the coming weeks. She asked Senators to "watch for an email invitation".
		2. He announced that Robert Loesch has agreed to serve as Parliamentarian for the spring semester. Dr. Loesch stated that his role is to consult with the President to insure efficiency and fairness in the business of the Senate. He distributed a short quiz on Parliamentary Procedure, and he advised Senators that all the statements on the quiz are false, according to Robert's Rules, Newly Revised.
	B.	Vice President Berghoef reported that all Senate committees are now full, or not taking new members.
		1. He called for self-nominations for the remaining seat on the Student Fees Committee. Sen. Sun, who sits on that committee, explained that the Committee advises President Eisler directly on changes or raises in student fees.
		2. He thanked Ted Halm for facilitating the posting of documents for this Senate meeting on the Senate website.
	C.	Secretary Alspach reported that she had sent congratulations and thank-you notes on behalf of the Senate. If Senators wish a note sent, they should let her know the recipient(s) and the nature of the note.
		1. She asked Senators to notify her if they wished to continue to receive Senate materials in "hard copy", observing that more than half of the Senators had requested to be taken off the "big white envelope" mailing list. She also asked for feedback on the electronic posting of documents at the Senate website. She and Paula Hadley will be working on updating the website when Paula returns to work.
		2. She asked to be copied in emails requesting 'absence with cause'. Some Senators had requested to be excused using the Calendar function for the December 8 special meeting, but this information only went to Hadley so it was not reflected in the Minutes for the December 8 meeting. The Minutes will be updated before final posting on the Website.

IV.	Committee Reports	
	A.	Leonard Johnson reported on behalf of the University Curriculum Committee. He provided a

		handout of all actions taken by the UCC in the last month.
		He reminded Senators that proposals for curriculum action for Fall 2010 should be received by the UCC by the end of January. All curriculum action for Fall 2010 must be approved by the Senate at the March meeting, to ensure that changes can be made in the Banner system before students begin the open registration period after Spring Break.
	B.	Assoc. VP Roberta Teahen reported on behalf of the Higher Learning Commission Committee.
		She distributed a handout and highlighted the progress on the timeline preparing for the HLC site visit in Spring 2011. She noted that Spring 2010 will be a key period for the Committee.
		Sen. Sun asked if the data on the handout had been collected by Institutional Testing and Research. Teahen clarified that the data had come from the Financial Aid office.
	C.	Fred Heck reported on the behalf of the General Education Task Force. Copies of the Philosophy draft were distributed to the Senators: "General Education at Ferris State University challenges students to develop and integrate the knowledge, skills, experiences and values necessary for personal and professional success in a diverse and dynamic world."
		Heck noted that two terms had fallen out of the draft: "citizenship" and "globalized". He said that the Task Force will be meeting again before a final draft is presented to the Senate. He asked for feedback on the draft statement.
	1.	Sen. Dakkuri commended the Task Force on producing a brief Philosophy statement. He strongly recommended staying with the statement as presented; otherwise, he felt that "we open the door to additions that make a statement of a very specific nature that will make the philosophy statement cumbersome".
	2.	Sen. Prakasam referenced the Globalization Initiative on campus. He suggested that the word "globalized" be inserted before the word "world" in the Philosophy statement. He distributed copies of a petition to that effect.
		Sen. Sun asked for clarification of the difference between "globalized" and "diverse".
		Sen. Prakasam responded that, while the term "diverse" is truly a dynamic term, the term "globalized" suggested the connections between countries in today's world in a new sense.
		Heck asked if using the term "interconnected" would capture the spirit of Sen. Prakasam's observation.
		There was brief discussion of the impact of the term "globalization".
		Sen. Thapa opined that the phrase "globalized world" was a redundancy. He preferred "interconnected" or "interdependent".
		Heck asking if "globalized society" would be an appropriate alteration.
		Sen. Prakasam argued that "globalized" is a key term being used around the world for a broader perspective than suggested by the term "society".
		Heck noted that Sen. Haneline was keeping a record of this discussion for the Task Force.
		Sen. Boncher offered "population" as an alternative term choice.
		Sen. Dakkuri reminded Senators about his initial statement, requesting the Task Force to keep the statement simple without serving specific purposes. He argued that the statement should be up to the reader to interpret.
		Sen. Prakasam countered that the draft statement might have been OK for the '60's or even the '80's, but we need to be thinking about the future.
		Sen. Smith agreed with Sen. Dakkuri that the draft statement's language is enough; any more specificity would leave someone out.
	3.	Sen. Hanna asked for a rationale for removing the term "citizenship" from the statement.
		Heck explained that the Task Force felt that the term "personal success" subsumes "citizenship". There were comments from others to this effect.
		Sen. Jorsch agreed that the statement should be generic. He felt that the learning outcomes coming from the statement could get more specific.
		Sen. Sun asked if "success" was appropriately singular. Sen. Haneline responded that

		the statement is grammatically correct.
		Sen. Haneline closed the discussion with a description of the process going forward. This statement will be “shopped around” to others, like Student Affairs. He reminded Senators that the statement is the beginning for a larger task to identify outcomes and courses that addressed them. He felt it was important that “we get this right as a foundation for what is coming.”
Attendance (Roll Call)		
Senators present	Abbasabadi, Alspach, Beistle, Berghoef, Bokina-Lashaway, Boncher, Brandly, Cline, Colley, Compton, Dakkuri, Dekoster, Drake, Griffin, D. Haneline, D. Hanna, Heaphy, Isler, Jewett, Jorsch, Klatt, Liszewski, Lovsted, Lukusa Barnett, Luplow, McLean, Nash, Prakasam, Purvis, Rewers, Sanderson, Skrocki, Smith, Speirs, Sun, Taylor, Thapa, Topcu	
Senators absent with cause		
Senators absent	Wagenheim, H. Hanna	
Ex Officio and Guests	Eisler, Erickson, Teahen, Cron, Edgerton, E. Haneline, Oldfield, Schmidt, Heck, Johnson, Wade	

V.	Old Business	
	A.	Sen. Haneline moved, seconded by Sen. Klatt, to endorse the Academic Program Review Council General Recommendations.
		Sen. Haneline highlighted that these recommendations transcend units, for example, data ought to be consistent “no matter where you cast your net into the stream”. He emphasized that the Council is not pointing fingers or directing to a solution with these Recommendations, and he invited questions.
	1.	Sen. Dakkuri asked for background on items 3 and 4: 3. “The College of Allied Health Sciences, the College of Arts and Sciences, and other colleges that may be involved, need to work together so that students needing lab science courses can get them at Ferris in a timely fashion.” 4. “The College of Allied Health Sciences, the College of Arts and Sciences, and other colleges that may be involved, need to work together so that students needing on-line Cultural Enrichment courses can get them at Ferris in a timely fashion.”
		Sen. Haneline summarized a history of conversations between units, so that students don’t get pushed to take requirements at other places.
	2.	Sen. Brandly asked about item 6: “Review of the programs in this cycle reveals great disparities among colleges regarding criteria used for the granting of release time. APRC recommends the development of more uniform time release criteria across the institution.” He questioned whether colleges should have choices.
		Sen. Haneline cited use of resources and fairness issues behind this recommendation. He gave an example of a Program Coordinator for twenty majors getting the same one-quarter release as a Program Coordinator for several hundred majors. The Council wondered if release time is the only compensation alternative, or if a stipend might be considered. He suggested using a business model, but not necessarily only one model.
		Sen. Sun noted the disparity in academic advising assignments in the College of Arts and Sciences, where an advisor might be asked to advise more than 30 students without any compensation or release.
		Sen. Dakkuri felt that item 6 may be beyond the charge of the APRC. He thought that this item could also be extended to consider other assignment issues like promotion, where there might be an argument for inconsistency even within a College.
		Sen. Haneline acknowledged Sen. Dakkuri’s concern “with due respect”, reminding all Senators that “we are in the advice business; we are simply noting a disparity. Our goal is aimed at improvement of learning outcomes.”
	3.	Sen. Sun addressed item 2: “An effort needs to be made to assure that institutional data is of a more uniform quality. In a number of instances in this review cycle, disparities existed between the data provided by the program and the data provided by Institutional Research and Testing. Wherever the same data is accessed from, the data received should be the

		same.” He observed that IR&T staff were always nice, but seemed rushed and busy. He opined that, since we are making data-based decisions, input and output have to be right. He recalled his question earlier in the meeting to Assoc. VP Teahen about HLC data. He wondered if IR&T was short-staffed.
	4.	Sen. Purvis observed that item 1 was the same as last year’s APRC recommendation. He wondered if there had been no improvement: “The University needs to develop comprehensive and ongoing equipment replacement and maintenance schedules on behalf of the many academic programs that rely on equipment for instructional purposes. It is true that many programs are successful at securing equipment donations, but these donations do not always occur when they are needed. And a program that relies on equipment for instruction should not be penalized because donations are not available. Any approach should be pro-active and take into account the multiple sources of equipment, including Perkins funds and industry-institution partnerships.”
		Sen. Haneline explained that this recommendation recurred because of the nature of program review coming in six-year cycles: the Council doesn’t see the same programs every year. The problem hasn’t gone away.
	The motion passed unanimously.	
	B.	Sen. Rewers continued discussion of amendments to the Charter.
	1.	Sen. Isler moved, seconded by Sen. Sanderson, to add Section 4 to Article VIII, Organization and Procedure, as follows: At large members shall be elected by plurality vote on a single ballot with the opportunity to vote for three (3) members. In the event of a tie, there will be a re-vote of the tied candidates.
		Sen. Sun questioned the nature of the tied vote; what if the first and second highest vote getters were tied?
		Sen. Alspach opined that the issue would only arise if the tie were for the third position. Sen. Berghoef agreed that a re-vote would only be necessary if the third place candidates were tied.
		Sen. Dakkuri elaborated that if the tie occurred between the first and second vote getters, or between the second and third vote getters, there would be no need for a re-vote.
		Sen. Haneline reminded Senators that “we’re all trying to avoid an infinite number of re-votes.”
		Sen. D. Hanna argued that there was no need for changing the current system; three separate ballots for members-at-large have served the Senate well. Sen. Thapa agreed.
		Sen. Jewett reminded Senators that the voting for member-at-large used to be done on plurality. There have been occasions where using the individual ballot system had led to the Senate electing a member-at-large without a quorum of votes as Senators left the meeting to attend to other business.
		Sen. Dakkuri agreed, and he suggested that the Senate should hold a meeting in May fully devoted to the election of the Executive Committee.
		Sen. Jewett argued that, if the April meeting began promptly at 11:00, there would be no need for a special meeting. He expressed concern that the business of the ‘out-going’ Senate had been allowed to carry over into the hour established for the organization of the new Senate. He hoped that by streamlining the method for counting votes on a single ballot, this situation could be avoided.
	The motion passed on voice vote.	
	2.	Sen. Rewers moved, seconded by Sen. Isler, to adopt the recommended revisions to Sections 5 through 15 of Article VIII, as newly numbered by the passage of Section 4.
		She pointed attention to the inclusion of Policy 1.1, Conference Committee Process, into the Charter.
		Sen. Abbasabaddi suggested that Section 10.1 be clarified to read “The Senate Executive Board and the office of the President of the University will have ten (10) working days to

		select the Conference Committee members.”
		The motion passed unanimously.
	3.	Sen. Rewers moved, seconded by Sen. Isler, to adopt Article IX, Senate Committees, as amended.
		Sen. Haneline asked for the rationale for changing the language from “a majority of units” to “multiple units”.
		Sen. Isler explained that there were cases where units didn’t have numbers to fill committees, citing the College of Professional and Technological Studies (CPTS) as an example.
		Sen. Sanderson asked if two committee members from the same unit would constitute a majority on the committee, citing the example of the APRC. Sen. Haneline clarified that the APRC has nine members, no more than two from a single unit, by committee design.
		Sen. Dakkuri asked for clarification of the term “multiple”; would this be interpreted as three or more?
		Sen. Isler gave the example of the University Graduate and Professional Council (UGPC) where there may need to be more representatives from a single college with several graduate or professional programs
		Sen. Rewers explained that the intent of the revision language was to achieve diversity of representation.
		Sen. Dakkuri expressed concern that later interpretations of the language might not achieve that goal; he preferred attaching a number, at least three, or accepting the language of “majority” as clearer.
		Sen. Haneline pointed to the pragmatics of recruitment to committees from smaller units, like University College or CPTS.
	a.	Sen. McLean moved to amend Section 1, seconded by Sen. Boncher, to read “a majority of the units, with no one unit having majority of membership...” The amendment passed unanimously.
		Sen. Purvis noted that the sentence in Section 1 used the term “should”, indicating that diversity in representation was desirable, but not mandatory. Sen. Jewett concurred that the choice of “shall” indicated an imperative but the term “should” did not. Sen. Purvis observed that there was no real need for the inclusion of the phraseology concerning “majority”, given the use of the term “should”. Sen. Hanna agreed that the choice of “should” was appropriate, but noted that if a committee member does not participate, the unit loses representation.
		The amended article passed with one nay.
	4.	Sen. Rewers moved, seconded by Sen. Isler, to amend Article X, Amendment as recommended by the Charter Revision Committee.
		Sen. Abbasabaddi asked for the rationale for the revisions recommended. Sen. Isler spoke to the last line of Section 1, explaining that any amendment would have to be approved by the President of the University to be recommended to the Board of Trustees. Sen. Abbasabaddi argued that the first person to be consulted on amending the Senate charter would be the President of the University anyway, so he questioned removing the President from the language of the Section. He supported adding the “approval of the Board of Trustees” to the Section. He noted that Article II Section 1 includes the President of the University in the Functions of the Academic Senate. Sen. Haneline understood that the intent of the revision was to give the Senate opportunity to go to the Board of Trustees if the President of the University disagreed with a Senate recommendation.
		Sen. Hanna expressed concern that the recommended revision in Section 1 filtered any amendments to the Charter through the Executive Committee. He wondered about the effect if an Executive Committee were ‘run by’ a single college. Sen. Abbasabaddi concurred, reading the recommendation to empower the Executive Committee unduly. Sen. Dakkuri asked if this revision had been requested by any members of Senate. Sen. Isler reminded him that the Charter provides for the Executive Committee to set the agenda

			for Senate business, but Senators retain procedures for bringing issues to the Senate. Sen. Haneline agree that any Senator can make a motion at a meeting
		a.	Sen. Abbasabaddi moved to amend the recommendation for Section 1, seconded by Sen. Dakkuri, to read "Proposals to amend this Charter may be submitted to the Senate by any of its members or by a resolution adopted by a majority of the members of any representative unit defined in article III, Section 1. With the approval of the Senate, the proposed amendment shall be placed upon the agenda for consideration at the next regular meeting. If the proposed amendment is adopted by the Senate, it shall be submitted in a referendum to the eligible electors as defined in article IV, Section 12. If the amendment is approved in the referendum, it shall be come a part of this Charter, subject to the approval of the Board of Trustees."
			The amendment passed with 30 ayes and 2 nays.
			Article X as amended passed unanimously.
		C.	Sen. Rewers moved, seconded by Sen. Isler, to separate the remaining Policy and Procedures from the Charter. The motion passed unanimously.
		D.	Sen. Alspach moved, seconded by Sen. Berghoef, to establish a standing Charter and Procedures Review Committee (see handout).
			Parliamentarian Loesch suggested that this committee is usually called the Rules Committee.
			Sen. Haneline suggested that the chair of the committee should be the Secretary of the Senate.
		1.	Sen. Hanna moved, seconded by Sen. Dakkuri, to amend the proposal to define the committee as five (5) Senators, representing five (5) separate units.
			The amendment passed unanimously.
		2.	Sen. Abbasadabbi moved, seconded by Sen. Dakkuri, to postpone discussion of the proposal to the February meeting.
			The motion to postpone passed unanimously.
		E.	Sen. Prakasam moved, seconded by Sen. Topcu, to recommend inserting the term "globalized" in the General Education Philosophy statement.
			He spoke to the importance of the term "globalization" in discussing current issues.
		1.	Sen. Dakkuri moved, seconded by Sen. Jewett, to table the motion.
			The motion to table passed unanimously.

VI.	Administrative Reports		
	A.	University President Eisler noted the lateness of the hour and simply welcomed the Senators back for the spring semester.	
	B.	Provost Erickson highlighted academic issues since the December meeting.	
		1.	He applauded the work of the Academic Service Learning (ASL) projects in 12 classes in the Fall semester.
		a.	He commended the work of Christine Bailey and her students in PLSC 121 to collect and deliver donations to Walter Reed Veterans Hospital.
		b.	He commended the work of Wendy Samuels' SOWK Interviewing class to mentor with middle school students and bring them to campus for a day.
		2.	He thanked the College of Business for hosting 600 high school students in DECA on campus.
		3.	He reported that Ferris has received a number of accolades across the nation for the development of the Educational Doctorate in Community College Leadership program. He anticipates that the Higher Learning Commission will sanction this new degree at their Feb. 8-9 visit to campus. There have been many contacts inquiring about the program, and he will keep the Senate informed about the progress of this initiative.
		4.	He congratulated the Welding Engineering program for receiving both TAC and ABET accreditations, the only Welding Engineering Technology program in the country with both accreditations.

	C.	Senate President Griffin thanked Sen. Rewers and the Charter Revision Committee for their commitment and work to review and revise the Senate Charter.

VII.	Open Forum	
	A.	Sen. Heaphy reminded Senators about the University budget meetings next week.
	B.	Sen. Prakasam announced the coming panel discussion sponsored by the Globalization Initiative.
	C.	Sen. Dakkuri encouraged all Senators to review the revisions to the Charter in total. He expressed concern with representation on the Executive Committee, recalling that not long ago the Executive Committee had three members from a college with less than 10% of the university faculty.
	D.	Sen. Jewett thanked Sen. Haneline for delaying the Academic Program Review Council General Recommendations to this meeting.

The meeting was adjourned at noon.

Sandy Alspach, Secretary

Richard Griffin, President

PROPOSAL SUMMARY AND ROUTING FORM

Proposal Title: Molecular Diagnostics Program

Initiating Unit or Individual: College of Allied Health Sciences/College of Professional and Technological Studies

Contact Person's Name: Elaine Staley **e-mail:** elainestaley@ferris.edu **phone:** 231-591-2275

Date or Term of Proposal Implementation: Fall 2010

Group I - A – New degree/major or major, redirection of a current offering, or elimination of a degree, major or minor

Group I - B – New minors or concentrations

Group II - A – Minor curriculum clean-up and course changes

Group II - B – New Course

Group III - Certificates

Group IV – Off-Campus Programs

Group/Individual	Signature	Date	Vote/Action *
Program Faculty		10/22/09	4 X Support 0 Support with Concerns 0 Not Support
Department Faculty		10/22/09	9 Support 3 Support with Concerns 0 Not Support
Department Head		10/22/09	X Support Support with Concerns Not Support
College Curriculum Committee		10/22/09	5 Support 0 Support with Concerns 0 Not Support
College Faculty		10/27/09	30 Support 3 Support with Concerns 0 Not Support Abstain
Dean		10/27/09	X Support Support with Concerns Not Support
University Curriculum Committee			Support Support with Concerns Not Support
Senate			Support Support with Concerns Not Support
Academic Affairs			Support Support with Concerns Not Support

* Support with Concerns or Not Support must include a list of specific concerns. Votes must be shown for faculty groups. Administrators check appropriate action taken.

To be completed by Academic Affairs

President (Date Approved)

Board of Trustees (Date Approved)

President's Council (Date Approved)

TABLE OF CONTENTS

Title	Page Number
Preliminary Curriculum Approval Form (PCAF)	3
Proposal summary	8
Summary of All Course Action Required	8
Addition of Existing FSU Courses to Program	9
Outcomes and Assessment Plan	11
Proposed Degree/Program	12
Program Description General Information	12
Admission Criteria	12
Continuation/Progression Criteria	12
Graduation Requirements	12
Assessment of Drawbacks	12
Subject Matter Studied	13
Curriculum Consultation Form B	14-25
Biology	14-17
Mathematics	18
College of Allied Health Sciences	19
Languages and Literature	20
Physical Sciences	21-22
Department of Clinical laboratory, respiratory and health administration programs (CHRA) - Concerns	23-25
Library and Instructional Services Consultation Form C	26
Program Major/Minor Check Sheet Form D	27-31
Proposed Check Sheet	27-30
Term-by-Term Plan for Students	31
New Course Information Form E	32
Course Data Entry Form F	33
Expected Implementation Date	66
Articulation	66
Accreditation	66
Licensure/Certification	66
Need for the Program/Degree	66
Offerings by Neighboring Institutions	66
Identify Differences	66
Relationship to Current University Programs	66
Compile Data Collected Regarding Demand by Employers, Profession, Industry	67
Expected Number of Majors	67
State and National Trends	67
Faculty	67
Facilities	68
Library Resources	68
Equipment, Computers Budget Implication of Curriculum Changes	68
Program Marketing and Recruitment	68

Ferris State University
Preliminary Curriculum Approval Form

Directions: This form should be completed using 11-point font or larger, and should be no longer than six pages (excluding the signature/comment pages). For purposes of expediting the preliminary approval process, forms may be forwarded electronically by the initiator and from one administrative level to another.

Name(s) of proposal initiator(s):	Ellen Haneline/Don Green
Department(s)/College(s):	Colleges of Allied Health Sciences and Professional and Technical Studies

Type of curriculum change (check one)

<input checked="" type="checkbox"/>	New degree/major
<input type="checkbox"/>	New minor requiring new courses/resources
<input type="checkbox"/>	New concentration in existing degree program
<input type="checkbox"/>	Curricular customization of existing program for off-campus cohort group
<input type="checkbox"/>	New certificate requiring 3 or more new courses and/or new resources
<input type="checkbox"/>	Existing program redirection or shift in emphasis if 3 or more new courses and/or new resources are required

1. Name of degree, major, concentration, certificate, or minor. Briefly describe the curriculum plan/template. *The proposed curriculum in Molecular Diagnostics is being designed to meet the requirements for accredited programs promulgated by the National Accrediting Agency for Clinical Laboratory Sciences (NAACLS). Graduates of the program will be able to sit for certification by the National Credentialing Agency for Laboratory Professionals (NCA).*

The program will be 4 years in length and lead to a bachelor of science degree. Prerequisite courses including those in Biology, Chemistry and Mathematics must be completed prior to the students' entry into the professional sequence.

The 128 credit hour curriculum plan is as follows:

**General Education: (34 credits) ;CAHS core: (10 credits) ; Chemistry: (11 cr.) Biology: (17 credits)
Computer science: (3 credits); Current Clinical Laboratory Science Courses: (20 credits); Program specific courses: (36 credits)**

2. Target date for implementation. Spring 2010
3. Briefly explain the rationale for this initiative. If the initiative involves customization of an existing program for delivery to an off-campus cohort group, also explain the nature of the proposed curricular customization.

The field of laboratory science is advancing towards the use of molecular techniques and molecular diagnostics with the increased push toward targeted drug therapy. This testing is used to aid in the diagnosis of cancer, infectious disease, predisposition to diseases, organ transplantation, cytogenetics, and pharmacodynamics. Genetic and genomic companies are demanding professionally educated, technically competent individuals to work in the growing industry especially in Western Michigan. There is also a demand nationally in hospitals, reference laboratories, private genetic laboratories and in the pharmaceutical industry. Rather

than eliminating the current programs in Medical Laboratory Technology and Medical Technology, the Molecular Diagnostics program is being proposed to provide an alternative for individuals who wish to specialize in this facet of laboratory practice. The program will be offered in Grand Rapids to take advantage of the existence of hospitals and other institutions whose services are genetically based who will provide internship experiences for students enrolled in the program.

4. Are there similar programs at other Michigan universities? If so, where? What is the enrollment in the other programs?

There are two similar programs in Michigan. One at Michigan State University where the biomedical laboratory diagnostics program offers a post baccalaureate certificate in molecular laboratory diagnostics and one at Northern Michigan University where the genetics major offers two tracks- cytogenetics and molecular biology. There are a total of 6 accredited programs in the nation, two of which are hospital based. Enrollment in the other programs is difficult to determine, however, discussions with the program personnel indicates that enrollment is fewer than 20 students per year per program.

5. Briefly explain any similarities of the proposed initiative (program objectives and/or curriculum) with already established FSU or KCAD programs:

The proposed program will utilize several of the courses from the Medical Technology program but will specialize in courses that enable students to learn how to denature, hybridize and amplify DNA to aid in the diagnosis of disease. To a lesser extent, the program contains courses required in the Biotechnology Program.

6. Briefly describe indicators of the employment market for students completing this initiative, including sources used for employment information/data.

Based upon a study conducted by Eduventures, a higher education research firm: "The medical technology field is a thriving industry- growth is not only due to technology advancements but also from the increased level of research and development; nationally, clinical laboratory technologists and technicians (according to the US Department of Labor, Bureau of Labor Statistics Occupational Outlook Handbook, molecular diagnosticians fall under the heading of clinical laboratory technology) are forecasted to experience a 14% growth between 2006 and 2016. According to the results of the survey conducted by Eduventure, the need for molecular diagnosticians is growing in the Grand Rapids region.

7. Briefly describe indicators of potential student interest/demand for the new initiative, including sources used for student market information/data.

Discussions with employers indicates that they will send their current employees to the program to gain necessary credentials. It is anticipated that the first 2 cohorts of students will come from this source until efforts are in place to form cooperative relationships with other colleges and universities to recruit students with backgrounds in Biology and Chemistry.

8. To what extent will this initiative draw new students to FSU or KCAD? To what extent will it draw students from existing programs? *New students will be drawn to the university because of the employees sent by the laboratories and those recruited from other colleges and universities. There may be some students who are currently enrolled in the BS degrees in Applied Biology and Medical Technology that will enroll, thus decreasing the enrollments in those two programs.*

9. Approximately how many students are expected to enroll?

_10 in the first year? ___30 after three years?

10. At which FSU campuses/regional centers or other sites will the initiative be offered?

Grand Rapids

11. Will Internet or other distance learning technology be used for course/program delivery? Describe. *At the current time, there are no plans to utilize internet or other internet distance learning technology for professional coursework, however, several of the support courses in the CORE and in general education are available via the internet and may be made available to students enrolled in the program.*

Complete questions 12, 13, 14 in consultation with department head/chair and/or dean.

12. Provide a rough estimate of the resources needed to implement the initiative:

	Start-up	After Three Years
Supply and expense	\$150,000	\$45,000
Equipment	\$500,000	\$150,000
Full-time faculty	\$65,000	\$142,054
Overload/adjunct faculty	\$	\$30,000
Other		\$2500 accreditation fee

13.

Estimate of Library Resources	Adequate	Some new resources needed	Significant number of resources needed
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Project the resources that could come from reallocation within the department or college and the new resources that would be required.

Please note that funding for this program has been set aside by the College of Professional and Technical Studies in anticipation of its approval. In addition, contacts have been made with a major Biotechnology firm regarding utilization of laboratory space and equipment to offset the cost to the university.

There will be a cost savings because the current laboratory for the Medical Laboratory Technology and the Medical Technology programs will be utilized for instruction of the already existing courses incorporated into the curriculum.

Additionally, there are very strong possibilities of contributions of reagents and other materials to offset the costs for supply and expense. The figures in the chart above are indicative of the costs should none of these occur.

13. Are there new space needs? If so, how much? How would the space be used? Has existing space been identified? If so, where? Is renovation/remodeling necessary?

Implementation of the Molecular Diagnostics program will require the development of a dedicated laboratory space if space is not available at the Genetics Institute. The space will need to be sufficient to support laboratory activities for 10 students plus one instructor. In addition to the dedicated laboratory, classroom and office space will become necessary. Space has been identified within the Applied Technology Center in Grand Rapids. Renovation and remodeling will be necessary to develop the laboratory space.

14. Is there professional accreditation for the program? Is it required or voluntary? Will accreditation be sought, and when? What will be the one-time and ongoing costs of accreditation?

Professional accreditation from the National Accrediting Agency for Clinical Laboratory Sciences (NAACLS) is available. It is voluntary, however graduates of nonaccredited programs are at a significant disadvantage for hire. Accreditation will be sought in the 3rd year of the program's operation. One time costs for accreditation are \$4,500 with an ongoing cost of \$2,500 per year.

15. Has there been preliminary discussion with other departments/colleges that will be involved in course/program delivery? If yes, what was the feedback?

This program is being jointly developed between the colleges of Allied Health Sciences and Professional and Technical Studies. There has been extensive discussion with the faculty in the Medical Technology Program as well as preliminary discussion with faculty in the Biology department. All are supportive of the proposal.

Department Head/Chair's signature: Ellen Haneline 2-9-09

If this is an interdepartmental initiative, include additional Department Head/Chair signatures

Comments:

Dean's or KCAD President's signature: Ellen Haneline/

Date 1/12/09

- For cross-college initiatives, include additional signature(s) of Dean(s)
- For KCAD initiatives, include KCAD President's signature
- For existing FSU-Big Rapids programs customized for off-campus delivery to a cohort group, include College and UCEL Deans' signatures

Comments:

Vice President for Academic Affairs' signature:

Donald L. S. Date 2-14-09
or Chancellor/VP of FSU/GR's signature

Approved Approval indicates permission to develop the full proposal. It does not assure final approval.

Comments and/or suggestions:

Not approved

Explanation:

c. Initiator(s)

Department Head/Chair(s)
Deans' Council and KCAD President
FSU University Curriculum Council
FSU Academic Senate and KCAD Senate
VPAA or Chancellor/VP of FSU/GR
FSU Intranet

Proposal Summary

The field of laboratory medicine is advancing towards the use of molecular techniques and molecular diagnostics. Molecular diagnostics is replacing some labor intensive and time sensitive testing, specifically testing used for the detections of leukemia, genetic disorders, pre-implantation screening, infectious disease, and cancer. The individuals who specialize in molecular diagnostics are often referred to as molecular diagnostic scientists (MDS). Presently most individuals seeking this specialized area of clinical laboratory science will either be a clinical laboratory scientist or medical technologist who trains on the job, an individual who pursues a post bachelors of science certificate in molecular diagnostics or an individual who pursues a master's degree in molecular diagnostics. The proposed bachelor's of science in molecular diagnostics would prepare the student to enter the workforce as a MDS with an extensive background in molecular diagnostics.

Molecular diagnostics is used to aid in the diagnosis of cancer, infectious disease, therapeutic drug monitoring (pharmacogenomics) and predisposition to disease. With the introduction of personalized medicine which, allows an individual to have a panel of genetic tests performed to determine predisposition to disease i.e. cardiovascular disease, diabetes or cancer, we will continue to see a rise in genetic testing. Molecular diagnostics can also aid what therapy should be used for a genetic disorder or disease i.e. determines if Herceptin can be used in breast cancer patients. Based on this information a physician can personalize care based on an individual's predisposition to disease. While traditional tests will still be in demand and require the skills that are taught in the clinical laboratory science programs, molecular diagnostics will require an individual who have an in depth understanding of DNA, RNA and proteins. The proposed program will have a stronger knowledge base of genetics and cell biology than the clinical laboratory science program and a stronger pathology and diagnostics background then the biotechnology program. In the spring of the student's second year through the spring of the student's third year five courses from the clinical laboratory science program will be included along with advanced level biology courses. Students will also enroll in two lab techniques courses in molecular diagnostics during the second and third year. In the fourth year students will focus on diagnostic methods and techniques utilizing DNA, RNA and protein analysis in infectious disease, hematology/oncology, molecular genetics and forensic/identity based testing.

Genetic and genomic companies are demanding certified, professionally educated, technically competent individuals to work in this growing facet of laboratory medicine especially in Western Michigan. There is also a demand nationally in hospitals, reference laboratories, private genetic laboratories and pharmaceutical industries. Formal studies have not been conducted to determine the demand because molecular diagnostics are being performed in clinical laboratories and clinical laboratory professionals are grouped as one entity which include MDS, CLS/MT and CLT/MLT. There have been several reports published regarding the clinical laboratory professionals shortage. Data acquired from Career InfoNet in 2009 estimates there will be a 12% increase in job openings nationally for clinical laboratory professionals by 2016. Within the state of Michigan this study estimates there will be a 6% increase in job openings. There are six National Accrediting Agency for Clinical Laboratory Sciences (NAACLS) approved MDS programs in the United States. There are 308 individuals certified in molecular pathology by the American Society for Clinical Pathology (ASCP). ASCP is the national certification agency for clinical laboratory sciences which includes medical technologists (MT), medical laboratory technicians (MLT) and molecular pathology (MP).

2. Summary of All Course Action Required*

a. Newly Created Courses to FSU:

Prefix	Number	Title
DMOL	110	Laboratory Techniques in Molecular Diagnostics
DMOL	210	Advanced Laboratory Techniques in Molecular Diagnostics
DMOL	220	Clinical Flow Cytometry
DMOL	221	Clinical Flow Cytometry Laboratory
DMOL	410	Principles of Molecular Diagnostics
DMOL	411	Principles of Molecular Diagnostics Laboratory
DMOL	420	Molecular Diagnosis of Infectious Disease
DMOL	421	Molecular Diagnosis of Infectious Disease Laboratory

Prefix	Number	Title
DMOL	430	Molecular Hematology/Oncology
DMOL	431	Molecular Hematology/Oncology Laboratory
DMOL	440	Molecular Genetics
DMOL	441	Molecular Genetics Laboratory
DMOL	450	Molecular Forensics/Identity Based Testing
DMOL	451	Molecular Forensics/Identity Based Testing Laboratory
DMOL	460	Management and Regulation in Molecular Diagnostics
DMOL	491	Molecular Diagnostics Internship
DMOL	499	Molecular Diagnostics Seminar

b. Courses to be Deleted From FSU Catalog:

Prefix	Number	Title
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c. Existing Course(s) to be Modified:

Prefix	Number	Title
---------------	---------------	--------------

d. Addition of existing FSU courses to program

Prefix	Number	Title
BIOL	121	General Biology 1
BIOL	122	General Biology 2
BIOL	205	Human Anatomy-Physiology
BIOL	286	General Microbiology
BIOL	300	Pathophysiology
BIOL	373	Cell Biology
BIOL	375	Principles of Genetics
BIOL	475	Bioinformatics
CCHS	101	Orientation-Health Care
CCHS	102	Safety Issues-Health Care
CCHS	315	Epidemiology - Statistics
CHEM	114	Intro to General Chemistry
CHEM	124	Intro Organic-Biochemistry
CLLS	101	Clinical Laboratory Science Orientation
CLLS	219	Hemostasis
CLLS	231	Hematology
CLLS	236	Diagnostic Microbiology
CLLS	241	Virology-Mycology-Parasitology
CLLS	252	Intro Clinical Immunology
COMM	105	Interpersonal Communication
		or
COMM	121	Fundamentals of Public Speaking
		or
COMM	221	Small Group Decision Making
ENGL	150	English I
ENGL	250	English 2
ENGL	321	Advanced Composition
		or
ENGL	323	Proposal Writing
MATH	115	Intermediate Algebra

Prefix	Number	Title
MRIS	102	Orientation to Med Vocabulary
PHIL	220	Ethics in Healthcare
		or
PHIL	320	Biomedical Ethics

e. Removal of existing FSU courses from program

Prefix	Number	Title
---------------	---------------	--------------

*Contact Senate Secretary or UCC Chair if spaces for additional courses are needed.

Outcomes Statement and Assessment Plan:

Outcome 1: Students will be prepared with the knowledge and technical skills required to work in the molecular diagnostics laboratory.

Evaluation Method	Expected Outcome	Schedule
Preceptor evaluation	80% of the students will score at least 4 out of 5	At the conclusion of the final internship assignment
National certification exam	100% of the students will be at or above the national average	One year post graduation
Employer survey	80% of the students will score at least 4 out of 5	One year post graduation
Post-test	100% of the students will score 10% higher on the pre-certification exam after completion of the clinical internship	At the conclusion of the clinical experience

Outcome 2: Students will be prepared to practice ethical behavior in the laboratory setting.

Evaluation Method	Expected Outcome	Schedule
Preceptor evaluation	80% of the students will score at least 4 out of 5	At the conclusion of the clinical internship
Faculty evaluation	80% of the students will score at least 4 out of 5	At the conclusion of DMOL 451
Employer survey	80% of the students will score at least 4 out of 5	One year post graduation

Outcome 3: Students will be able to apply the principles of quality assurance to the molecular diagnostics laboratory.

Evaluation Method	Expected Outcome	Schedule
Preceptor evaluation	80% of the students will score at least 4 out of 5	At the conclusion of DMOL 491
Case study review	80% of the students will be able propose a workable solution to a stated problem	At the conclusion of DMOL 499

Outcome 4: Students will be prepared to communicate effectively with co-workers, physicians and other allied health professionals.

Evaluation Method	Expected Outcome	Schedule
Preceptor evaluation	80% of the students will score at least 4 out of 5	At the conclusion of DMOL 491
Employer survey	80% of the students will score at least 4 out of 5	One year post graduation

PROPOSED DEGREE/PROGRAM:

Program Description General Information:

Students will be required to wear a lab coat, disposable gloves and protective eye wear while in the teaching laboratory due to biological and chemical hazards. Students will use electrophoresis equipment, microscopes along with more automated systems such as a flow cytometer, capillary electrophoresis, thermal-cycler and real time polymerase chain reaction (rt-PCR) instruments.

Toward the end of the fall semester of the student's fourth year an internship site will be assigned to the students. While we anticipate a few internship sites in Michigan some students may be required to relocate to other states such as California, Florida, Minnesota, New York, North Carolina, Ohio, Utah and Vermont.

Upon completion of the molecular diagnostics program students will be able to work in hospital, reference, public health, genetic and pharmaceutical laboratories. Graduates of the program will be proficient at utilizing methods and techniques that detect disease, predisposition of diseases and determine appropriate therapy in infectious disease, hematology/oncology, molecular pathology, forensic and identity testing laboratories. Graduates may also work for regulatory agencies such as the College of American Pathologists (CAP), Centers for Medicare and Medicaid Services (CMS) or Joint Commission (JC). Graduates can work as field technicians who install and repair molecular diagnostic instruments. New graduates will be eligible for national certification through the ASCP.

Admission criteria: Students selecting Molecular Diagnostics as their major in their freshman year will enroll as a Pre-Molecular Diagnostics major. The student will apply to the professional phase of the Molecular Diagnostics program in the fall of the student's second year. The prerequisites for the professional phase include a grade of "C" or higher in BIOL 205, BIOL 286 and CHEM 124. Also at least an ACT sub score of 24 or a grade of "C" or above in MATH 115 and computer competence. Cumulative GPA 2.50.

Continuation/progression criteria: Students must meet the following University requirements regarding electives: Cultural Enrichment – select three (3) courses with one at the 200 level or above; Social Awareness – three (3) courses in two different areas, including one "Foundation" course and one at the 200 level or higher. One of the Cultural Enrichment OR Social Awareness courses must fulfill Global Consciousness requirement, and one must fulfill the Race, Ethnicity, or Gender requirement. In order to progress in the program, students must earn a grade "C" or above in each of the courses listed (BIOL 121, BIOL 122, BIOL 205, BIOL 286, BIOL 300, BIOL 373, BIOL 375, BIOL 475, CCHS 101, CCHS 102, CCHS 315, CHEM 114, CHEM 124, CLLS 101, CLLS 219, CLLS 231, CLLS 236, CLLS 241, CLLS 252, DMOL 110, DMOL 210, DMOL 220, DMOL 221, DMOL 410, DMOL 411, DMOL 420, DMOL 421, DMOL 430, DMOL 431, DMOL 440, DMOL 441, DMOL 450, DMOL 451, DMOL 465, DMOL 491 and DMOL 499*).

Students who return to the University after an interrupted enrollment (not including Summer Semester) must 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.

*Internship is 12 weeks and may require relocation outside the state of Michigan

Graduation requirements: In order to graduate from the program, students must have cumulative GPA of 2.50 or better.

Assessment of drawbacks:

1. With the program being offered on the Big Rapids and Grand Rapids campuses it may be difficult to recruit students who would be willing to relocate in the middle of the program sequence.
2. There is a budgetary impact on the Clinical Laboratory Science programs with the addition of 32 students as the DMOL program is funded through the College of Professional and Technological Studies (CPTS).
3. There is a budgetary impact on the CPTS program because of the need to build a specialized laboratory for the DMOL courses.
4. The Grand Rapids campus will need to arrange for chemical and biological waste disposal.

Subject matter studied: Students will be required to complete the general education requirements for bachelor's of science degree as prescribed by the university. Students will have several courses in biology that include general biology, human anatomy and physiology, cell biology, principles of genetics, bioinformatics, general chemistry, introduction to organic and biochemistry that will prepare them with the theoretical foundations for the DMOL courses. Students will also be required to enroll in courses offered in the clinical laboratory science program such as diagnostic immunology, hematology, hemostasis, immunology and virology-mycology-parasitology prior to enrolling in the molecular diagnostics courses to ensure they are ready for the molecular diagnostic techniques and theory. Students will take courses in lab techniques in molecular diagnostics, advanced lab techniques in molecular diagnostics, clinical flow cytometry, principles of molecular diagnostics, molecular hematology/oncology, molecular genetics, molecular forensics/identity based testing and molecular diagnosis of infectious disease.

Curriculum Consultation Forms: Biology

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

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From: Joseph Lipar [mailto:lipar@ferns.edu]
To: Elaine C. Arata [mailto:ELAINA@FERNS.EDU]
Date: Wednesday, April 08, 2009 11:25AM
Subject: Re: Molecular Diagnostics Proposal

Elaine,

I have attached the response of the Biology Department to the Molecular Diagnostics Proposal. Please contact me if you want to discuss any of the items that were addressed. I will put the Form B in campus mail today.

Joe Lipar
Program Coordinator, Biology

Attachments:    

 Response to

Done Internet 100%

Response of the Biology Department to Proposal for a Molecular Diagnostics Program

The Biology Department has reviewed the proposal for a Molecular Diagnostics Program. The faculty voted predominantly to Support with Concerns. We feel that there is a job market for students who are trained in this particular area, and that it would be advantageous to have FSU produce them rather than another university/college. However, a number of concerns also arose and can be categorized as follows:

- 1) A number of BIOL courses are included in the proposed curriculum. For some of these, especially BIOL 375 (Genetics – A Required Course for All of our Majors) and BIOL 373 (Cell Biology – A Required Course for Most of our Majors), there is concern that adding 10 seats per year to those courses could be difficult. Currently those two courses are in high demand by our own biology majors, such that in most cases only juniors and (mostly) seniors are admitted into them. Many of our faculty expressed concern that our students might be forced out of these courses if seats are saved for students in the Molecular Diagnostics Program. On the other hand, if those seats are not reserved, it would be very difficult for the students in the Molecular Diagnostics Program to procure a seat in those courses. We believe some discussion on this matter should occur such that placement into these courses, for students in either major, is not left up to chance.
- 2) The timeline associated with the curriculum for the proposed program is not clear. I did get some personal feedback from the initiator of the proposal that students would be at the Big Rapids campus for the first 2.5 years of the program. Our faculty were mostly concerned with the fact that it would be difficult to complete all of the required coursework at the Big Rapids campus in just five semesters, particularly given the prerequisites for some of the BIOL courses that are required (and the potential problems with course access, as described above). We cannot adequately address this problem with the information that was provided in the proposal. In other words, we do not know for sure which courses would be taken in Big Rapids and which would be taken in Grand Rapids. This should be clearly outlined in the proposal.
- 3) Relating to Item #2 above, the Biology Department wants to be clear that we do not intend to offer courses such as BIOL 121, BIOL 122, BIOL 108, BIOL 205, BIOL 373, or BIOL 375 in Grand Rapids now or in the future.
- 4) The courses in BIOL and CHEM that have been selected for this program may not be strong enough to prepare the students in this program for a career in an evolving area of applied science. It was suggested that BIOL 286 (or even BIOL 386) would be better than BIOL 108 and that BIOL 205 should be replaced with the BIOL 321/322 sequence. Although this would add more credits to the degree, it would better prepare the students for what they will encounter in the future. (A similar argument was made against the inclusion of CHEM 114 and CHEM 214 instead of the CHEM 121/122 and CHEM 321/322 sequences, but that is probably an item for the Physical Sciences Department to address.)

MEMORANDUM

TO: Karen Strasser, PhD
Biology Department Head

FROM: Elaine Staley, MT(ASCP)
Molecular Diagnostics Coordinator

DATE: September 24, 2009

RE: Response to Biology Department Regarding Molecular Diagnostics Program

Thank you for meeting with me on Monday, September 21, 2009 to discuss the increase of enrollment from 10 students to 32 for the proposed molecular diagnostics program. Below I have summarized our discussions.

1. MATH 117 will not meet the needs of the student to take the advanced BIOL, CHEM and DMOL courses for the proposed program. This course was removed from the curriculum checklist and MATH 115 will be the only option for the student.
2. The increase enrollment of 10 to 32 students is a huge issue as there are already issues for BIOL 373 and BIOL 375. To give the biology department more time to adjust for the additional student load it was decided that for the first two years of the program the enrollment would be changed to 24 students admitted annually. After year two the enrollment would be 32 students annually.
3. The addition of BIOL 475 and BIOL 300 courses to the molecular diagnostics curriculum were made. Presently BIOL 475 is only offered once every other year. With the addition of DMOL students to this course this will allow the biology department to offer this course once a year allowing the biotechnology students more flexibility in their schedule. BIOL 300 is offered all three semesters. With the enrollment change for the first two years adding this course would be acceptable.
4. Changing the internship to summer will allow the students to be on the Big Rapids campus for three full years and increase the chances of a student being able to enroll in the high demand BIOL classes such as BIOL 300, BIOL 373, BIOL 375 and BIOL 475.
5. Concerns over the lack of upper level chemistry and biology to allow the students to pursue other biology related programs or graduate school was discussed. The group agreed that a second track may be pursued that advised those students who wish to pursue graduate school to take the upper level chemistry and biology that is required for pre-pharmacy and pre-optometry.
6. The location of the DMOL program will be Grand Rapids after the student has completed all prerequisites which include all MATH, CHEM, BIOL, CLLS, MRIS and CCHS with the exception of CCHS 315 as it is offered on-line.

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File Edit Forward Mail Follow Up Tools

From: Karen Strasser/FSU
To: Elaine C Staley/FSU@FERRIS
Date: Monday, October 05, 2009 02:01PM
Subject: Re: Molecular Diagnostics
History: This message has been replied to.

Elaine:
 I spoke to the instructor of the course, Dr. Clifton Franklund, and he confirmed that students would be able to take BIOL 286 after they had taken CHEM 114+124. The students would be well advised to take BIOL 121+122 first as well since the depth of the material in this CHEM sequence is somewhat lower.

This said, I believe Dave Frank may be working on changes to the CHEM 114+124 sequence. If CHEM 124 is replaced by a modified CHEM 214, This should also be acceptable for entrance into BIOL 286.

Karen

 Karen Strasser, Ph.D.
 Associate Professor and Head
 Department of Biological Sciences
 Ferris State University
 620 Campus Drive, ASC 2004
 Big Rapids, MI 49307

Phone: 231-591-2543
 Fax: 231-591-2540
 Karen_Strasser@ferris.edu
 Elaine C Staley/FSU

Elaine C Staley/FSU

10/01/2009 11:25 AM

To: Karen Strasser/FSU@FERRIS, David V Frank/FSU@FERRIS
 cc: Ellen J Haneline/FSU@FERRIS
 Subject: Re: Molecular Diagnostics [1]

Drs. Strasser and Frank:

I have attached a memo regarding the summary of our discussions concerning the molecular diagnostics program.

I will need to have something in writing confirming that the DMOL students can take BIOL 286 if they have received a C or above in CHEM 114 and CHEM 124.

Please let me know if you have any questions.

Attachments: MEMO...

Done

Internet 100%

Curriculum Consultation Forms: Mathematics

FORM B
Rev 7/23/07

CURRICULUM CONSULTATION FORM

To be completed by each department affected by the proposed change, new degree, new program, new minor, or new course. Potential duplication of coursework is reason for consultation.

1. This completed form must be forwarded with the proposal to the chair/head of the department to be consulted.
2. The department must respond within 20 calendar days of receipt of this form to insure inclusion in the final proposal. The completed form is returned to the initiator and inserted into the proposal.

Failure to respond is interpreted as support for the proposal.

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

RE: Proposal Title Molecular Diagnostics Program

Initiator(s): College of Allied Health Sciences/College of Professional and Technological Studies

Proposal Contact: Elaine Staley **Date Sent:** March 15, 2009

Department: College of Professional and Technological Studies

Campus Address: ALU 113

(Please print)

Responding Department: Mathematics

Chair/Head/Coordinator: X **Date Returned:** 3/19/09

Based upon department faculty review on 3/17/09 (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 scheduling, room assignments, faculty load, and prerequisites for your department. Use additional pages, if necessary.

CURRICULUM CONSULTATION FORM

To be completed by each department affected by the proposed change, new degree, new program, new minor, or new course. Potential duplication of coursework is reason for consultation.

1. This completed form must be forwarded with the proposal to the chair/head of the department to be consulted.
2. The department must respond within 20 calendar days of receipt of this form to insure inclusion in the final proposal. The completed form is returned to the initiator and inserted into the proposal.

Failure to respond is interpreted as support for the proposal.

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

RE: Proposal Title Molecular Diagnostics Program

Initiator(s): College of Allied Health Sciences/College of Professional and Technological Studies

Proposal Contact: Elaine Staley **Date Sent:** March 15, 2009

Department: College of Professional and Technological Studies

Campus Address: ALU 113

(Please print)

Responding Department: Clinical Laboratory, Respiratory Care & Health Admin.

Chair/Head/Coordinator: [Signature]

Date Returned: 3/19/09

Based upon department faculty review on 3/19/09 (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 scheduling, room assignments, faculty load, and prerequisites for your department. Use additional pages, if necessary.

The small number of students enrolled in this program will have negligible impact on scheduling, room assignments and faculty load. The courses are offered on-line or in Grand Rapids each semester.

CURRICULUM CONSULTATION FORM

To be completed by each department affected by the proposed change, new degree, new program, new minor, or new course. Potential duplication of coursework is reason for consultation.

- 1. This completed form must be forwarded with the proposal to the chair/head of the department to be consulted.
2. The department must respond within 20 calendar days of receipt of this form to insure inclusion in the final proposal. The completed form is returned to the initiator and inserted into the proposal.

Failure to respond is interpreted as support for the proposal.

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

RE: Proposal Title Molecular Diagnostics Program

Initiator(s): College of Allied Health Sciences/College of Professional and Technological Studies
Proposal Contact: Elaine Staley Date Sent: March 15, 2009
Department: College of Professional and Technological Studies
Campus Address: ALU 113
(Please print)

Responding Department: Languages and Literature
Chair/Head/Coordinator: _____ Date Returned: 3/25/09
[Signature]

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 scheduling, room assignments, faculty load, and prerequisites for your department. Use additional pages, if necessary.

Curriculum Consultation Forms: Physical Sciences

MEMORANDUM

TO: David Frank, PhD
Physical Sciences Department Head

FROM: Elaine Staley, MT(ASCP)
Molecular Diagnostics Coordinator

DATE: March 17, 2009

RE: Molecular Diagnostics Program Proposal

Clinical Laboratory, Respiratory Care and Health Administration have proposed a Molecular Diagnostics Program. We are anticipating an enrollment of approximately 10 students for this program track annually. Attached you will find a description of the program and a listing of proposed courses listed on Form A. I have also attached an approval form which is Form B. Please feel free to contact me if you have any questions and return Form B to me by Monday, April 6, 2009.

CURRICULUM CONSULTATION FORM

To be completed by each department affected by the proposed change, new degree, new program, new minor, or new course. Potential duplication of coursework is reason for consultation.

1. This completed form must be forwarded with the proposal to the chair/head of the department to be consulted.
2. The department must respond within 20 calendar days of receipt of this form to insure inclusion in the final proposal. The completed form is returned to the initiator and inserted into the proposal.

Failure to respond is interpreted as support for the proposal.

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

RE: Proposal Title Molecular Diagnostics Program

Initiator(s): College of Allied Health Sciences/College of Professional Technical Studies

Proposal Contact: Elaine Staley **Date Sent:** March 15, 2009

Department: College of Professional and Technological Studies

Campus Address: ALU 113

(Please print)

Responding Department: _____

Chair/Head/Coordinator: _____ 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 scheduling, room assignments, faculty load, and prerequisites for your department. Use additional pages, if necessary.

Concerns from the CHRA Department

To: Barb Ross, Chairperson CAHS Curriculum Committee
Elaine Staley, Consultant

From: Marie Sichelsteel, Paula Hagstrom and Cindy Konrad

Subject: Support with Concerns of the Bachelor of Science in Molecular Diagnostics

Date: October 13, 2009

We as tenured faculty have the following concerns regarding the approval of the Bachelor of Science Degree in Molecular Diagnostics:

1. Student enrollment – The original PCAF (Preliminary Curriculum Approval Form) that was approved by the Board of Trustees was for an initial enrollment of ten (10) students. That has now changed to admitting twenty four (24) students in the first and second years and thirty two (32) in the third year.
2. Faculty resources –
 - a. At this time there are no new tenure track faculty positions for this program thus it will rely on temporary faculty assignments.
 - b. This program will add numerous SCH (student credit hours) to existing courses.
 - c. The CLLS program currently has two tenure track positions and two three year temporary positions.
3. Space resources –
 - a. Increase use of current facilities on the Big Rapids campus.
 - b. Grand Rapids facility is unknown.
 - c. Special facilities are needed for this type of program
4. Equipment and Supplies – High costs for lab sections, as much as, \$1000 per week

MEMORANDUM

TO: Paula Hagstrom
Cindy Konrad
Marie Sichelsteel

FROM: Elaine Staley, MT(ASCP)
Molecular Diagnostics Coordinator

DATE: October 19, 2009

RE: Response to CRHA Molecular Diagnostics Program Concerns

Below is a response to your concerns regarding the proposed Molecular Diagnostics program.

1. Student enrollment – The original PCAF (Preliminary Curriculum Approval Form) that was approved by the Board of Trustees was for an initial enrollment of ten (10) students. That has now changed to admitting twenty four (24) students in the first and second years and thirty two (32) in the third year.

Response: The increase from 10 students to 32 students was done to help generate revenue for the proposed program which will help offset the reagent and instrumentation costs. On a side note the PCAF was approved by the Vice President for Academic Affairs not the Board of Trustees.

2. Faculty resources –

- a. At this time there are no new tenure track faculty positions for this program thus it will rely on temporary faculty assignments.

Response: The statement above is true but this is also true for all programs across the university per the request of President Eisler to meet budget expectations. Until this freeze on hiring new tenure tract faculty is lifted we will have to rely on temporary positions for this program.

- b. This program will add numerous SCH (student credit hours) to existing courses.

Response: This program will add another student section to the College of Allied Health Sciences (CAHS) core curriculum which equates to 4 credits of face to face classes and 4 credits of on-line courses. The Clinical Laboratory Sciences (CLLS) courses, which are 10 credits, are lecture only. The CLLS labs that are associated with the lecture courses were dropped per the request by CLLS faculty and DMOL 110 and DMOL 210 were created to make the laboratory techniques more molecular in focus. The CLLS classes will need to have a larger lecture hall to accommodate the addition of 32 students.

- c. The CLLS program currently has two tenure track positions and two three year temporary positions.

Response: The CLLS faculty will not be responsible for teaching the DMOL courses. Per the proposal for the molecular diagnostics program there will be a molecular diagnostics program director. During the first three years this individual will be responsible for teaching the DMOL 110 and DMOL 210 courses, assisting with teaching loads of the CLLS program and preparing documentation for the National Accrediting Agency for Clinical Laboratory Science (NAACLS) accreditation. After that time the program director will be responsible for teaching the DMOL core curriculum in Grand Rapids and an additional faculty member will be hired to assist with the DMOL core curriculum teaching loads, coordinating student internships and maintaining reagents/instrumentation for the teaching laboratory. Adjunct faculty will be hired to teach the DMOL 110 and DMOL 210 courses that are offered on the Big Rapids campus.

3. Space resources –
 - a. Increase use of current facilities on the Big Rapids campus.

Response: This is also true but one of the goals of the university is to increase freshman and overall student enrollment.

- b. Grand Rapids facility is unknown.

Response: Space has been set aside in Grand Rapids at the Applied Technology Center (ATC).

- c. Special facilities are needed for this type of program

Response: The molecular diagnostics proposal states the need for special ventilation for the teaching laboratory to decrease contamination while the students are practicing molecular techniques. One laboratory will be built to accommodate this request no additional facilities will be required.

4. Equipment and Supplies – High costs for lab sections, as much as, \$1000 per week

Response: Money has been set aside for this program by the College of Professional and Technological Studies. The cost for the set up of the teaching laboratory will be expensive due to the cost of the instrumentation and reagents. To offset this cost we have increased the enrollment from 10 to 32 students. We will be talking to in-vitro diagnostic (IVD) manufacturers to identify companies that would be willing to donate instruments and reagents to the program.

Library and Instructional Services Consultation Form:

FORM C
Rev. 07/27/07

FLITE SERVICES CONSULTATION FORM

To be completed by the liaison librarian and approved by the Dean of FLITE. All returned forms should be included in the proposal. **FLITE must respond within 20 calendar days of receipt of this form to insure that the form is included in the final proposal.**

FAILURE TO RESPOND IS CONSIDERED AS SUPPORT OF THE CHANGE.

RE: Proposal Title: Molecular Diagnostics Program

Projected number of students per year affected by proposed change: 10

Initiator(s): College of Allied Health Sciences/College of Professional and Technological Studies

Proposal Contact: Elaine Staley Date Sent: March 17, 2009

Department: College of Professional and Technological Studies **Campus Address:** ALU 113
(Please print)

Liaison Librarian Signature: [Signature] **Date:** [Date]

Dean of FLITE Signature: [Signature] **Date Returned:** 3-20-09

Based upon our review on 3-20-09 (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.

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

Proposal is approved. The library will support the program. The library will provide the necessary resources to support the program. The library will provide the necessary resources to support the program.

FORM D PROPOSED

Bachelor of Science Molecular Diagnostics

Biology and Chemistry – 35 Credits Required			
BIOL	121	General Biology 1 (CHEM 121 or CHEM 114)	4
BIOL	122	General Biology 2 (BIOL 121 and CHEM 121 or CHEM 114)	4
BIOL	205	Human Anatomy-Physiology (CHEM 114 with a C- or better or CHEM 121)	5
BIOL	286	General Microbiology (CHEM 122)	3
BIOL	300	Pathophysiology BIOL 205 or 321 with a grade of C- or better and CHEM 124 or 214 or 321 with a grade of C- or better.	3
BIOL	373	Cell Biology (BIOL 122 with a grade of C- or better and CHEM 124 or CHEM 214 with grade C- or better)	3
BIOL	375	Principles of Genetics (BIOL 122 with a grade of C- or better)	3
BIOL	475	Bioinformatics (BIOL 375 with a grade of C- or better)	3
CHEM	114	Intro to General Chemistry (A year of HS chemistry substitutes for CHEM 103 Pre-Requisites CHEM 103 with a grade of C- or better or yr of HS Chem & MATH 110 with a grade of C- or better or ACT 19 or SAT 460)	4
CHEM	124	Into Organic-Biochemistry (CHEM 114 grade C- or better)	3
Clinical Laboratory Science – 10 Credits Required			
CLLS	101	Clinical Laboratory Science Orientation	1
CLLS	219	Hemostasis (BIOL 205 grade C or better)	1
CLLS	231	Hematology (BIOL 205 and CHEM 214 grade C or better)	2
CLLS	236	Diagnostic Microbiology (BIOL 108 or BIOL 286, BIOL 205 and CHEM 214 grade C or better)	2
CLLS	241	Virology-Mycology-Parasitology (BIOL 108 or BIOL 286 grade C or better)	2
CLLS	252	Intro to Clinical Immunology (BIOL 205 grade C or better)	2

College of Allied Health Sciences – 8 Credits Required			
Prefix	Course Number	Course Title	Credits
CCHS	101	Orientation-Health Care	3
CCHS	102	Safety Issues-Health Care	1
CCHS	315	Epidemiology - Statistics	3
MRIS	102	Medical Vocabulary	1
		Computer Competency	
Communication Competence – 12 Credits Required			
COMM	105 or 121 or 221	Interpersonal Communication or Fundamentals of Public Speaking or Small Group Decision Making	3
ENGL	150	English 1 (ACT of 14)	3
ENGL	250	English 2 (ENGL150 or equivalent)	3
ENGL	321 or 323	Advanced Composition or Proposal Writing (ENGL 250 or 211 with a grade of C or better)	3
Cultural Enrichment – 9 Credits Required			
Select three courses cultural enrichment courses, including one at the 200 level or above.			
PHIL	220 or 320	Ethics in Health Care or Biomedical Ethics (ENGL 150)	3
		Cultural Enrichment	3
		Cultural Enrichment	3
Molecular Diagnostics Core – 34 Credits Required			
DMOL	110	Laboratory Techniques in Molecular Diagnostics (Concurrent enrollment in CLLS 219 and CLLS 252)	2
DMOL	210	Advanced Laboratory Techniques in Molecular Diagnostics (DMOL 110 C or better and concurrent enrollment in CLLS 231 and CLLS 236)	2
DMOL	220	Clinical Flow Cytometry (DMOL 210, CLLS 219, CLLS 231 and CLLS 252 grade C or better)	3
DMOL	221	Clinical Flow Cytometry Lab (DMOL 210, CLLS 219, CLLS 231 and CLLS 252 grade C or better and concurrent enrollment in DMOL 220)	2
DMOL	410	Principles of Molecular Diagnostics (BIOL 300, BIOL 373, BIOL 375, BIOL 475, CLLS 219, CLLS 231, CLLS 236, CLLS 252, DMOL 210 with a C or better and concurrent enrollment in DMOL 220 and DMOL 221)	2
DMOL	411	Principles of Molecular Diagnostics Lab (BIOL 300, BIOL 373, BIOL 375, BIOL 475, CLLS 219, CLLS 231, CLLS 236, CLLS 252, DMOL 210 with a C or better and concurrent enrollment in DMOL 220, DMOL 221 and DMOL 410).	2
DMOL	420	Molecular Diagnosis of Infectious Disease (DMOL 410/411 grade C or better)	2

Molecular Diagnostics Core - Continued			
Prefix	Course Number	Course Title	Credits
DMOL	421	Molecular Diagnosis of Infectious Disease Lab (DMOL 410/411 grade C or better and concurrent enrollment in DMOL 420)	1
DMOL	430	Molecular Hematology/Oncology (DMOL 410/411 grade C or better)	2
DMOL	431	Molecular Hematology/Oncology Lab (DMOL 410/411 grade C or better and concurrent enrollment in DMOL 430)	1
DMOL	440	Molecular Genetics (DMOL 410/411 grade C or better)	2
DMOL	441	Molecular Genetics Lab (DMOL 410/411 grade C or better and concurrent enrollment in DMOL 440)	1
DMOL	450	Molecular Forensics/Identity Based Testing (410/411 grade C or better)	2
DMOL	451	Molecular Forensics/Identity Based Testing Lab (DMOL 410/411 grade C or better and concurrent enrollment in DMOL 450)	1
DMOL	460	Management and Regulation in Molecular Diagnostics (DMOL 420/421, DMOL 430/431, DMOL 440/441 and DMOL 450/451)	2
DMOL	491	Molecular Diagnostics Internship*(DMOL 420/421, DMOL 430/431, DMOL 440/441 and DMOL 450/451)	6
DMOL	499	Molecular Diagnostics Seminar (DMOL 420/421, DMOL 430/431, DMOL 440/441 and DMOL 450/451)	1
Quantitative Skills – 3 Credits Required			
MATH	115	Intermediate Algebra (MATH 110 with a grade of C- or better, or 19 on ACT or 460 on SAT)	3
Social Awareness – 9 Credits Required *			
Choose three social awareness courses, in at least two different subject areas. One social awareness course must be a foundations course. One social awareness course must be at the 200 level or above.			
		Social Awareness	3
		Social Awareness	3
		Social Awareness	3

*The Global Consciousness General Education may be met within Social Awareness or Cultural Enrichment classes

Progression:

Students must meet the following University requirements regarding electives: Cultural Enrichment – select three (3) courses with one at the 200 level or above; Social Awareness – three (3) courses in two different areas, including one “Foundation” course and one at the 200 level or higher. One of the Cultural Enrichment OR Social Awareness courses must fulfill Global Consciousness requirement, and one must fulfill the Race, Ethnicity, or Gender requirement. In order to progress in the program, students must earn a grade “C” or above in each of the courses listed (BIOL 121, BIOL 122, BIOL 205, BIOL 286, BIOL 300, BIOL 373, BIOL 375, BIOL 475, CCHS 101, CCHS 102, CCHS 315, CHEM 114, CHEM 124, CLLS 101, CLLS 219, CLLS 231, CLLS 236, CLLS 241, CLLS 252, DMOL 110, DMOL 210, DMOL 220, DMOL 221, DMOL 410, DMOL 411, DMOL 420, DMOL 421, DMOL 430, DMOL 431, DMOL 440, DMOL 441, DMOL 450, DMOL 451, DMOL 465, DMOL 491 and DMOL 499*).

Students who return to the University after an interrupted enrollment (not including Summer Semester) must 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.

*Internship is 12 weeks and may require relocation outside the state of Michigan

120 credits required for graduation

FERRIS STATE UNIVERSITY
COLLEGE OF ALLIED HEALTH SCIENCES
Molecular Diagnostics – Bachelor of Science Degree PROPOSED

Name _____

Student Number _____

Fall – Year 1			Spring – Year 1			Summer – Year 1		
BIOL 121	General Biology 1	4	BIOL 122	General Biology 2	4			
CHEM 114	Introduction to General Chemistry	4	CCHS 102	Safety Issues in Health Care	1			
CLLS 101	Clinical Lab Sciences Orientation	1	CHEM 124	Intro Organic-Biochemistry	3			
MATH 115	Intermediate Algebra	3	COMM 105/121/221	Interpersonal Communication/Fundamentals of Public Speaking or Small Group Decision Making	3			
	Total	12	MRIS 102	Orientation to Medical Vocabulary	1			
				Total	12			
Fall – Year 2			Spring – Year 2			Summer – Year 2		
BIOL 205	Human Anatomy and Physiology	5	BIOL 375	Principles of Genetics	3	CLLS 219	Hemostasis	1
BIOL 286	General Microbiology	3	CLLS 241	Virology-Mycology-Parasitology	2	CLLS 252	Introduction to Clinical Immunology	2
CCHS 101	Orientation to Health Care	3		Cultural Enrichment Elective	3	DMOL 110	Lab Techniques in Molecular Diagnostics	2
ENGL 150	English 1	3	ENGL 250	English 2	3		Total	5
	Total	14		Social Awareness Elective	3			
				Total	14			
Fall – Year 3			Spring – Year 3			Summer – Year 3		
BIOL 373	Cell Biology	3	BIOL 300	Pathophysiology	3			
CLLS 231	Hematology	2	BIOL 475	Bioinformatics	3			
CLLS 236	Diagnostic Microbiology	2	PHIL 220 or PHIL 320	Ethics in Healthcare or Biomedical Ethics	3			
DMOL 210	Advanced Laboratory Techniques in Molecular Diagnostics	2		Cultural Enrichment Elective	3			
	Social Awareness Elective	3		Social Awareness Elective	3			
	Total	12		Total	15			
Fall – Year 4			Spring – Year 4			Summer – Year 4		
CCHS 315	Epidemiology and Statistics	3	DMOL 420/421	Molecular Diagnosis of Infectious Disease and Lab	3	DMOL 460	Management and Regulation in Molecular Diagnostics	2
DMOL 220/221	Clinical Flow Cytometry and Lab	5	DMOL 430/431	Molecular Hematology/Oncology and Lab	3	DMOL 491	Molecular Diagnostics Internship	6
DMOL 410/411	Principles in Molecular Diagnostics	4	DMOL 440/441	Molecular Genetics and Lab	3	DMOL 499	Molecular Diagnostics Seminar	1
ENGL 321 or ENGL 323	Advanced Composition or Proposal Writing	3	DMOL 450/451	Molecular Forensics/Identity Based Testing and Lab	3		Total	9
	Total	15		Total	12			

NEW COURSE INFORMATION FORM

Course Identification:

Prefix:	Number	Title
DMOL	110	Laboratory Techniques in Molecular Diagnostics

Course Description:

This course will cover basic molecular laboratory techniques such as pipetting, specimen collection, quality control, calibration and laboratory mathematics. The course will also cover extraction techniques and determination of DNA purity using a spectrophotometer. Prerequisites: concurrent enrollment in CLLS 219 and CLLS 252.

Course Outcomes:

This course will provide students with the ability to:

1. Utilize pipettes to accurately dispense reagents and specimens
2. Select the proper collection devices and tubes for molecular specimens
3. Identify a quality control trends and biases
4. Utilize reagents to extract DNA from blood samples

Assessment Plan:

1. Given a pipette, 95% of the students will accurately dispense reagents and specimens
2. Given an laboratory test requisition, 95% of the students will select the proper tube and collection device
3. Given a set of quality control data, 95% of the students will be able to identify a trend, shift or bias
4. Given an extraction procedure, 95% of the students will be able to extract DNA and analyze for potential contamination

Course Outline including Time Allocation:

2 credits (0+6) = 90 Hours

- | | |
|--|----------|
| 1. Specimen Collection | 12 Hours |
| 2. Pipetting | 6 Hours |
| 3. Laboratory Mathematics | 24 Hours |
| 4. Quality Control and Calibration | 24 Hours |
| 5. Extraction Techniques and DNA Quality | 24 Hours |

I. ACTION TO BE TAKEN: CREATE A NEW COURSE

Term Effective (6 digit code only): **201008**

II. PROPOSED FOR NEW COURSE:

a. Course Prefix

DMOL

b. Number

110

c. Enter Contact Hours per week in boxes.

LECTure

LAB

INDEpendent Study – Check (x)

Practicum:

Seminar:

d. Course Title: **Laboratory Techniques in Molecular Diagnostics** (Limit to 30 characters/spaces.)

e. College Code: **AH**

f. Department Code: **CRHA**

Credit Hours: Check (x) type and enter maximum and minimum hours in boxes.

g. Type: Variable

Fixed

h. Minimum Credit Hours **2**

i. Maximum Credit Hours **2**

Maximum Credit Hours **2**

Maximum Credit Hours **2**

Maximum Credit Hours **2**

Maximum Credit Hours **2**

Maximum Credit Hours **2**

Maximum Credit Hours **2**

j. May Be Repeated for Added Credit: Check (x) Yes

No

k. Levels: Check (x) Undergraduate Graduate Professional

l. Grade Method: Check (x) Normal Grading

Credit/No Credit only (Pass/Fail)

Credit/No Credit only (Pass/Fail)

Credit/No Credit only (Pass/Fail)

Credit/No Credit only (Pass/Fail)

Credit/No Credit only (Pass/Fail)

m. Does proposed new course replace an equivalent course? Check (x) Yes

No

n. Equivalent course: Prefix

Number

See instructions on Replacement courses.

o. CATALOG DESCRIPTION – Limit to 75 words – PLEASE BE CONCISE.

This course will cover basic molecular laboratory techniques such as pipetting, specimen collection, quality control, calibration and laboratory mathematics. The course will also cover extraction techniques and determination of DNA purity using a spectrophotometer.

p. Term(s) Offered: **Summer** (See instructions for listing.)

q. Max. Section Enrollment: **16**

r. Prerequisites/Co-requisites/Restrictions: (If none, leave blank.) Limited to 100 spaces.

Prerequisites: concurrent enrollment in CLLS 219 and CLLS 252.

UCC Chair Signature/Date:

Academic Affairs Approval Signature/Date:

_____/____/____

_____/____/____

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

Office of the Registrar use ONLY

Date Rec'd: ____ Date Completed: ____ Entered: SCACRSE __ SCADETL __ SCARRES __ SCAPREQ

—

NEW COURSE INFORMATION FORM

Course Identification:

Prefix:	Number	Title
DMOL	210	Advanced Laboratory Techniques in Molecular Diagnostics

Course Description:

This course will cover basic microscopy skills, introduction to normal and abnormal blood cell morphology, lymphocyte extraction, immunologic techniques and an introduction to flow cytometry. Prerequisites: DMOL 110 C or better and concurrent enrollment in CLLS 231 and CLLS 236.

Course Outcomes:

This course will provide students with the ability to:

1. Identify the components of a microscope
2. Distinguish white and red blood cells utilizing a hemocytometer
3. Identify normal and abnormal blood cells from blood, body fluids or bone marrow
4. Extract lymphocytes from the buffy coat of a centrifuged blood specimen

Assessment Plan:

1. Given a image of a microscope, 95% of the students will be able to identify the components of a microscope
2. Given a blood sample, 95% of the students will correctly quantify red and white blood cells utilizing a hemocytometer
3. Given a blood cell image, 95% of the students will be able to identify the normal or abnormal cell
4. Given a blood sample, 95% of the students will be able to extract lymphocytes from the buffy coat of a blood sample

Course Outline including Time Allocation:

2 credits (0+6) = 90 Hours

- | | |
|---|----------|
| 1. Basic Optical Microscopy | 6 Hours |
| 2. Hemocytometer | 12 Hours |
| 3. Basic Overview of Hematology Analyzers | 9 Hours |
| 4. Normal Blood Cell and Abnormal Blood Cell Morphology | 33 Hours |
| 5. Lymphocyte Extraction | 6 Hours |
| 6. Electrophoresis, Immunoassays and Flow Cytometry | 24 Hours |

CREATE NEW COURSE
Course Data Entry Form

Create New Course

FORM F

I. ACTION TO BE TAKEN: CREATE A NEW COURSE

Term Effective (6 digit code only): 201008

II. PROPOSED FOR NEW COURSE:

a. Course Prefix **DMOL** b. Number **210** c. Enter Contact Hours per week in boxes.
LECTure LAB INDEPENDent Study – Check (x)
Practicum: Seminar:

d. Course Title: **Advanced Laboratory Techniques in Molecular Diagnostics** (Limit to 30 characters/spaces.)

e. College Code: **AH** f. Department Code: **CRHA**
Credit Hours: Check (x) type and enter maximum and minimum hours in boxes.

g. Type: Variable Fixed h. Minimum Credit Hours **2** i. Maximum Credit Hours **2**

j. May Be Repeated for Added Credit: Check (x) Yes No

k. Levels: Check (x) Undergraduate Graduate Professional

l. Grade Method: Check (x) Normal Grading Credit/No Credit only (Pass/Fail)

m. Does proposed new course replace an equivalent course? Check (x) Yes No

n. Equivalent course: Prefix Number See instructions on Replacement courses.

o. CATALOG DESCRIPTION – Limit to 75 words – PLEASE BE CONCISE.

This course will cover basic microscopy skills, introduction to normal and abnormal blood cell morphology, lymphocyte extraction, immunologic techniques and a brief introduction to flow cytometry.

p. Term(s) Offered: **Fall** (See instructions for listing.) q. Max. Section Enrollment: **16**

r. Prerequisites/Co-requisites/Restrictions: (If none, leave blank.) Limited to 100 spaces.

Prerequisites: DMOL 110 C or better and concurrent enrollment in CLLS 231 and CLLS 236.

UCC Chair Signature/Date: _____ / ____ / ____

Academic Affairs Approval Signature/Date: _____ / ____ / ____

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

Office of the Registrar use ONLY

Date Rec'd: _____ Date Completed: _____ Entered: SCACRSE __ SCADETL __ SCARRES __ SCAPREQ

NEW COURSE INFORMATION FORM

Course Identification:

Prefix:	Number	Title
DMOL	220	Clinical Flow Cytometry

Course Description:

This course will provide an overview of flow cytometry and how the results are used to aid in the detection of disease. Prerequisites: DMOL 210, CLLS 219, CLLS 231 and CLLS 252 C or better.

Course Outcomes:

This course will provide students with the ability to:

1. Construct a dot plot for a normal cell population
2. Identify the components of a flow cytometer
3. Utilize data from a flow cytometer to determine the quality of a graft transplant

Assessment Plan:

1. Given a dot plot generated from a flow cytometer, 95% of the students will be able to indicate where the normal cell populations are located
2. Given a diagram of a flow cytometer, 95% of the students will be able to label the components of a flow cytometer
3. Given simulated results from a graft transplant, 95% of the students will be able to determine if the graft transplant is adequate

Course Outline including Time Allocation:

3 credits (3+0) = 45 Hours

- | | |
|---|---------|
| 1. Surface Marker Assays and Immunologic Reagents | 5 Hours |
| 2. Basic Principles in Clinical Flow Cytometry | 5 Hours |
| 3. Hematopoietic Cell Differentiation | 2 Hours |
| 4. Software Applications | 3 Hours |
| 5. Flow Cytometric Analysis in Diagnosis and Prognosis | 5 Hours |
| 6. Flow Cytometry in Allogeneic Transplantation | 5 Hours |
| 7. Clinical Assays of Red Cells, Platelets and Phagocytes | 5 Hours |
| 8. Hematopoietic Stem and Progenitor Cells | 5 Hours |
| 9. DNA Content of Solid Tumors | 5 Hours |
| 10. Blood Group Antigens | 5 Hours |

I. ACTION TO BE TAKEN: CREATE A NEW COURSE

Term Effective (6 digit code only): 201308

II. PROPOSED FOR NEW COURSE:

a. Course Prefix **DMOL** b. Number **220** c. Enter Contact Hours per week in boxes.
LECTure 3 LAB INDEpendent Study – Check (x)
Practicum: Seminar:

d. Course Title: **Clinical Flow Cytometry** (Limit to 30 characters/spaces.)

e. College Code: **AH** f. Department Code: **CRHA**
Credit Hours: Check (x) type and enter maximum and minimum hours in boxes.

g. Type: Variable Fixed h. Minimum Credit Hours **3** i. Maximum Credit Hours **3**

j. May Be Repeated for Added Credit: Check (x) Yes No

k. Levels: Check (x) Undergraduate Graduate Professional

l. Grade Method: Check (x) Normal Grading Credit/No Credit only (Pass/Fail)

m. Does proposed new course replace an equivalent course? Check (x) Yes No

n. Equivalent course: Prefix Number See instructions on Replacement courses.

o. CATALOG DESCRIPTION – Limit to 75 words – PLEASE BE CONCISE.

This course will provide an overview of flow cytometry and how the results are used to aid in the detection of disease.

p. Term(s) Offered: **Fall** (See instructions for listing.) q. Max. Section Enrollment: **32**

r. Prerequisites/Co-requisites/Restrictions: (If none, leave blank.) Limited to 100 spaces. Prerequisites: DMOL 210, CLLS 219, CLLS 231 and CLLS 252 grade C or better

UCC Chair Signature/Date: _____ / /

Academic Affairs Approval Signature/Date: _____ / /

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

Course Identification:

Prefix:	Number	Title
DMOL	221	Clinical Flow Cytometry Laboratory

Course Description:

Directed practice utilizing methodology and instrumentation in the hematology, histocompatibility, cryopreservation and blood donor laboratory. A special focus will be on analyzing virtual images and correlating cell morphology to disease state. This course will cover flow cytometry and bead array technology. Prerequisites: DMOL 210, CLLS 219, CLLS 231 and CLLS 252 grade C or better and concurrent enrollment in DMOL 220

Course Outcomes:

This course will provide students with the ability to:

1. Distinguish abnormal cell lines utilizing clinical data, images and flow cytometry data
2. Show proficiency in flow cytometry techniques
3. Show proficiency in bead array techniques to determine if the donor organ is compatible

Assessment Plan:

1. Given a virtual image and case study, 95% of the students will be able to identify the abnormal cell line
2. Given a specimen, 95% of the students will be able to utilize a flow cytometer to accurately detect disease
3. Given a specimen, 95% of the students will be able to utilize bead array techniques to accurately detect if a donor is a match for the recipient

Course Outline including Time Allocation:

2 credits (0+6) = 90 Hours

- | | |
|--|----------|
| 1. Flow Cytometer and Bead Array Assays | 48 Hours |
| 2. Histocompatibility Assays | 21 Hours |
| 3. Cryopreservation and Stem Cell Assays | 21 Hours |

CREATE NEW COURSE
Course Data Entry Form

Create New Course

FORM F

I. ACTION TO BE TAKEN: CREATE A NEW COURSE

Term Effective (6 digit code only): **201308**

II. PROPOSED FOR NEW COURSE:

a. Course Prefix **DMOL** b. Number **221** c. Enter Contact Hours per week in boxes.
LECTure LAB INDEpendent Study – Check (x)
Practicum: Seminar:

d. Course Title: **Clinical Flow Cytometry Laboratory** (Limit to 30 characters/spaces.)

e. College Code: **AH** f. Department Code: **CRHA**
Credit Hours: Check (x) type and enter maximum and minimum hours in boxes.

g. Type: Variable Fixed h. Minimum Credit Hours **2** i. Maximum Credit Hours **2**

j. May Be Repeated for Added Credit: Check (x) Yes No

k. Levels: Check (x) Undergraduate Graduate Professional

l. Grade Method: Check (x) Normal Grading Credit/No Credit only (Pass/Fail)

m. Does proposed new course replace an equivalent course? Check (x) Yes No

n. Equivalent course: Prefix Number See instructions on Replacement courses.

o. CATALOG DESCRIPTION – Limit to 75 words – PLEASE BE CONCISE.

Directed practice utilizing methodology and instrumentation in the hematology, histocompatibility, cryopreservation and blood donor laboratory. A special focus will be on analyzing virtual images and correlating cell morphology to disease state. This course will cover flow cytometry and bead array technology.

p. Term(s) Offered: **Fall** (See instructions for listing.) q. Max. Section Enrollment: **16**

r. Prerequisites/Co-requisites/Restrictions: (If none, leave blank.) Limited to 100 spaces.

Prerequisites: DMOL 210, CLLS 219, CLLS 231 and CLLS 252 grade C or better and concurrent enrollment in DMOL 220

UCC Chair Signature/Date: _____ / / _____

Academic Affairs Approval Signature/Date: _____ / / _____

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Date Rec'd: _____ Date Completed: _____ Entered: SCACRSE __ SCADETL __ SCARRES __ SCAPREQ

NEW COURSE INFORMATION FORM

Course Identification:

Prefix:	Number	Title
DMOL	410	Principles of Molecular Diagnostics

Course Description:

This course will provide an overview of nucleic acid structure, gene expression and genetic disease. Proper collection and processing of blood, bone marrow, and body fluids for molecular testing will be covered. Fundamentals of DNA and RNA isolation, amplification, hybridization and analysis will also be discussed. Prerequisites: BIOL 300, BIOL 373, BIOL 375, BIOL 475, CLLS 219, CLLS 231, CLLS 236, CLLS 252, DMOL 210 with a C or better and concurrent enrollment in DMOL 220 and DMOL 221.

Course Outcomes

This course will prepare students to:

1. Illustrate replication, transcription and translation
2. Construct a RT-PCR test for a given microorganism
3. Identify if a given tumor cell/cells are amplifying based on FISH analysis

Assessment Plan

1. Given a diagram of a cell, 95% of the students will be able to label structures in the cell where replication, transcription and translation are occurring
2. Given a genetic code for a microorganism, 95% of the students will be able to select primers and probes that should be used in a RT-PCR test
3. Given an image of a FISH analysis, 95% of the students will correctly identify if the cells are amplifying

Course Outline including Time Allocation:

2 credits (2 + 0) = 30 Hours

- | | |
|--|---------|
| 1. Introduction to Molecular Diagnostics | 2 Hours |
| 2. Electrophoresis and Probe Selection | 3 Hours |
| 3. DNA Amplification Techniques | 5 Hours |
| 4. Electrophoretic Methods for Mutation Detection and DNA Sequencing | 5 Hours |
| 5. Single-Nucleotide Polymorphisms | 3 Hours |
| 6. Standards and Quality Assurance in Molecular Diagnostics | 2 Hours |
| 7. Fluorescence In Situ Hybridization | 5 Hours |
| 8. Microarray Approaches to Gene Expression Analysis | 5 Hours |

I. ACTION TO BE TAKEN: CREATE A NEW COURSE

Term Effective (6 digit code only):

II. PROPOSED FOR NEW COURSE: Complete all sections a through r. See manual for clarification.

a. Course Prefix b. Number c. Enter Contact Hours per week in boxes.
LECTure 2 LAB INDEpendent Study – Check (x)
Practicum: Seminar:

d. Course Title: (Limit to 30 characters/spaces.)

e. College Code: f. Department Code:
Credit Hours: Check (x) type and enter maximum and minimum hours in boxes.

g. Type: Variable Fixed h. Minimum Credit Hours i. Maximum Credit Hours

j. May Be Repeated for Added Credit: Check (x) Yes No

k. Levels: Check (x) Undergraduate Graduate Professional

l. Grade Method: Check (x) Normal Grading Credit/No Credit only (Pass/Fail)

m. Does proposed new course replace an equivalent course? Check (x) Yes No

n. Equivalent course: Prefix Number See instructions on Replacement courses.

o. CATALOG DESCRIPTION – Limit to 75 words – PLEASE BE CONCISE.

This course will provide an overview of nucleic acid structure, gene expression and genetic disease. Proper collection and processing of blood, bone marrow, and other bodily fluids for molecular testing will be covered. Fundamentals of DNA and RNA isolation, amplification, hybridization and analysis will also be discussed.

p. Term(s) Offered: (See instructions for listing.) q. Max. Section Enrollment:

r. Prerequisites/Co-requisites/Restrictions: (If none, leave blank.) Limited to 100 spaces

Prerequisites: BIOL 300, BIOL 373, BIOL 375, BIOL 475, CLLS 219, CLLS 231, CLLS 236, CLLS 252, DMOL 210 with a C or better and concurrent enrollment in DMOL 220 and DMOL 221.

UCC Chair Signature/Date: _____ / / _____

Academic Affairs Approval Signature/Date: _____ / / _____

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

Course Identification:

Prefix:	Number	Title
DMOL	411	Principles of Molecular Diagnostics Laboratory

Course Description:

Directed practice utilizing methodology and instrumentation in the molecular diagnostics laboratory. Techniques using DNA and RNA extraction, purification and quantification methods from blood, body fluids and tissue. Methods that will be used in this course will be polymerase chain reaction (PCR), Real Time PCR (rt-PCR) and capillary electrophoresis. Prerequisites: BIOL 300, BIOL 373, BIOL 375, BIOL 475, CLLS 219, CLLS 231, CLLS 236, CLLS 252, DMOL 210 with a C or better and concurrent enrollment in DMOL 220, DMOL 221 and DMOL 410.

Course Outcomes

This course will prepare students to:

1. Extract DNA and RNA
2. Select the appropriate method for analysis of a blood specimen
3. Prepare an amplification procedure that could be utilized in the molecular diagnostics laboratory

Assessment Plan

1. Given a blood specimen, 95% of the students will be able to extract DNA or RNA with little or no assistance
2. Given a case study and blood specimen, 95% of the students will be able to select the appropriate method for analysis
3. Given an amplification technique, 95% of the students will prepare a procedure that could be utilized in a molecular diagnostics laboratory

Course Outline including Time Allocation:

2 credits (0 + 6) = 90 Hours

- | | |
|---------------------------------|----------|
| 1. DNA and RNA extraction | 36 Hours |
| 2. DNA amplification techniques | 36 Hours |
| 3. RNA amplification techniques | 9 Hours |
| 4. Other molecular techniques | 9 Hours |

I. ACTION TO BE TAKEN: CREATE A NEW COURSE

Term Effective (6 digit code only): 201308

II. PROPOSED FOR NEW COURSE: Complete all sections a through r, See manual for clarification

a. Course Prefix: DMOL b. Number: 411 c. Enter Contact Hours per week in boxes.
LECTure: LAB: 6 INDEpendent Study – Check (x)
Practicum: Seminar:

d. Course Title: Principles of Molecular Diagnostics Laboratory (Limit to 30 characters/spaces.)

e. College Code: AH f. Department Code: CRHA
Credit Hours: Check (x) type and enter maximum and minimum hours in boxes.

g. Type: Variable Fixed h. Minimum Credit Hours: 2 i. Maximum Credit Hours: 2

j. May Be Repeated for Added Credit: Check (x) Yes No

k. Levels: Check (x) Undergraduate Graduate Professional

l. Grade Method: Check (x) Normal Grading Credit/No Credit only (Pass/Fail)

m. Does proposed new course replace an equivalent course? Check (x) Yes No

n. Equivalent course: Prefix Number See instructions on Replacement courses.

o. CATALOG DESCRIPTION – Limit to 75 words – PLEASE BE CONCISE.

Directed practice utilizing methodology and instrumentation in the molecular diagnostics laboratory. Techniques using DNA and RNA extraction, purification and quantification methods from blood, body fluids and tissue. Methods that will be used in this course will be polymerase chain reaction (PCR), Real Time PCR (rt-PCR) and capillary electrophoresis.

p. Term(s) Offered: Fall (See instructions for listing.) q. Max. Section Enrollment: 16

r. Prerequisites/Co-requisites/Restrictions: (If none, leave blank.) Limited to 100 spaces

Prerequisites: BIOL 300, BIOL 373, BIOL 375, BIOL 475, CLLS 219, CLLS 231, CLLS 236, CLLS 252, DMOL 210 with a C or better and concurrent enrollment in DMOL 220, DMOL 221 and DMOL 410.

UCC Chair Signature/Date: _____ / / _____

Academic Affairs Approval Signature/Date: _____ / / _____

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Date Rec'd: _____ Date Completed: _____ Entered: SCACRSE __ SCADETL __ SCARRES __ SCAPREQ

NEW COURSE INFORMATION FORM

Course Identification:

Prefix:	Number	Title
DMOL	420	Molecular Diagnosis of Infectious Disease

Course Description:

This course will cover topics in molecular methods for detection of various viruses, bacteria, fungus and parasites. Prerequisites: DMOL 410/411 grade C or better.

Course Outcomes:

This course will prepare students to:

1. Compare targets utilized in molecular diagnostics for the detection of sexually transmitted disease.
2. Compare advantages and disadvantages of using molecular based methods and culture based methods.
3. Analyze genes involved with the emergence of antimicrobial resistance.

Assessment Plan:

1. Given a genetic code and case study, 95% of the students will be able to identify the target for the sexually transmitted pathogen.
2. Given a case study, 95% of the students will be able to describe whether a traditional culture or molecular method should be utilized.
3. Given a genetic sequence, 95% of the students will be able to identify the gene responsible for antimicrobial resistance.

Course Outline including Time Allocation:

2 credits (2 + 0) = 30 Hours

- | | |
|---|---------|
| 1. Application of molecular analyses to infectious disease | 5 Hours |
| 2. Molecular diagnosis of microorganisms causing infectious disease i.e. Parvovirus B 19 and Epstein-Barr Virus (EBV) | 4 Hours |
| 3. Molecular diagnosis of sexually transmitted disease | 5 Hours |
| 4. Strain Typing | 3 Hours |
| 5. Molecular analysis of HIV infection | 3 Hours |
| 6. Hepatitis Virus Genotyping | 5 Hours |
| 7. Line Probe Assay (LiPA) | 3 Hours |
| 8. Miscellaneous Organisms | 2 Hours |

I. ACTION TO BE TAKEN: CREATE A NEW COURSE

Term Effective (6 digit code only):

II. PROPOSED FOR NEW COURSE: Complete all sections a through r. See manual for clarification.

a. Course Prefix b. Number c. Enter Contact Hours per week in boxes.
LECTure 2 LAB INDEpendent Study – Check (x)
Practicum: Seminar:

d. Course Title: (Limit to 30 characters/spaces.)

e. College Code: f. Department Code:
Credit Hours: Check (x) type and enter maximum and minimum hours in boxes.

g. Type: Variable Fixed h. Minimum Credit Hours i. Maximum Credit Hours

j. May Be Repeated for Added Credit: Check (x) Yes No

k. Levels: Check (x) Undergraduate Graduate Professional

l. Grade Method: Check (x) Normal Grading Credit/No Credit only (Pass/Fail)

m. Does proposed new course replace an equivalent course? Check (x) Yes No

n. Equivalent course: Prefix Number See instructions on Replacement courses.

o. CATALOG DESCRIPTION – Limit to 75 words – PLEASE BE CONCISE.

This course will cover topics in molecular methods for detection of various viruses, bacteria, fungus and parasites.

p. Term(s) Offered: (See instructions for listing.) q. Max. Section Enrollment:

r. Prerequisites/Co-requisites/Restrictions: (If none, leave blank.) Limited to 100 spaces

Prerequisites DMOL 410/411 grade C or better.

UCC Chair Signature/Date: _____ / / _____

Academic Affairs Approval Signature/Date: _____ / / _____

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NEW COURSE INFORMATION FORM

Course Identification:

Prefix:	Number	Title
DMOL	421	Molecular Diagnosis of Infectious Disease Laboratory

Course Description:

Directed practice utilizing methodology and instrumentation commonly used in molecular infectious disease laboratory. Molecular methods used to detect and phenotype infectious disease organisms such as viruses, bacteria, and fungi will be demonstrated. Techniques used to identify resistance in microorganisms will also be discussed and demonstrated. Prerequisites: DMOL 410/411 grade C or better and concurrent enrollment in DMOL 420.

Course Outcomes:

This course will prepare students to:

1. Utilize methods for the detection of infectious disease.
2. Identify proper specimen collection for bacteria and viruses.
3. Identify sequence targets for detection of microorganisms.
4. Identify resistance in microorganisms by analyzing simulated data.

Assessment Plan:

1. Given a sample, 95% of the students will be able to utilize methods to accurately detect infectious disease.
2. Given a case study, 95% of the students will be able to state whether proper collection techniques were utilized.
3. Given a sample, 95% of the students will be able to identify which sequence targets should be utilized in the detection of infectious disease.
4. Given data, 95% of the students will be able to identify if the organism is antimicrobial resistant.

Course Outline including Time Allocation:

1 credits (0+3) = 45 Hours

1. Molecular assays for the detection of viruses	15 Hours
2. Molecular assays for the detection of sexually transmitted disease	18 Hours
3. Molecular assays for the detection for fungi	3 Hours
4. Molecular assays for the detection of parasites	3 Hours
5. Molecular assays for the detection of respiratory tract pathogens	6 Hours

I. ACTION TO BE TAKEN: CREATE A NEW COURSE

Term Effective (6 digit code only):

II. PROPOSED FOR NEW COURSE: Complete all sections a through r. See manual for clarification.

a. Course Prefix b. Number c. Enter Contact Hours per week in boxes.
LECTure LAB 3 INDEpendent Study – Check (x)
Practicum: Seminar:

d. Course Title: (Limit to 30 characters/spaces.)

e. College Code: f. Department Code:
Credit Hours: Check (x) type and enter maximum and minimum hours in boxes.

g. Type: Variable Fixed h. Minimum Credit Hours i. Maximum Credit Hours

j. May Be Repeated for Added Credit: Check (x) Yes No

k. Levels: Check (x) Undergraduate Graduate Professional

l. Grade Method: Check (x) Normal Grading Credit/No Credit only (Pass/Fail)

m. Does proposed new course replace an equivalent course? Check (x) Yes No

n. Equivalent course: Prefix Number See instructions on Replacement courses.

o. CATALOG DESCRIPTION – Limit to 75 words – PLEASE BE CONCISE.

Directed practice utilizing methodology and instrumentation commonly used in molecular infectious disease laboratory. Molecular methods used to detect and phenotype infectious disease organisms such as viruses, bacteria, and fungi will be demonstrated. Techniques used to identify resistance in microorganisms will also be discussed and demonstrated.

p. Term(s) Offered: (See instructions for listing.) q. Max. Section Enrollment:

r. Prerequisites/Co-requisites/Restrictions: (If none, leave blank.) Limited to 100 spaces
Prerequisites: DMOL 410/411 grade C or better and concurrent enrollment in DMOL 420.

UCC Chair Signature/Date: _____

Academic Affairs Approval Signature/Date: _____

_____/_____/____

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FORM E

NEW COURSE INFORMATION FORM

Course Identification:

Prefix:	Number	Title
DMOL	430	Molecular Hematology/Oncology

Course Description:

This course will cover topics related to the molecular pathogenesis of human cancer, diagnosis of lymphoma, classification of neoplasms and genetic abnormalities in acute and chronic leukemias. This course will also cover molecular diagnostics in coagulation. Prerequisites: DMOL 410/411 grade C or better.

Course Outcomes:

This course will prepare students to:

1. Identify the checkpoints of cell division
2. Examine the molecular targets that are useful for diagnosing and monitoring solid tumors
3. Identify translocation associated with hematological malignancies

Assessment Plan:

1. Given a photograph of a given cell division, 95% of the students will be able to identify the correct checkpoint and predict if the cell will be able to proliferate correctly.
2. Given a molecular target, 95% of the students will be able to identify the solid tumor and what therapies might be effective.
3. Given a chromosome translocation, 95% of the students will identify the hematologic malignancy.

Course Outline including Time Allocation:

2 credits (2 + 0) = 30 Hours

- | | |
|--|---------|
| 1. Cancer incidences and mortality | 5 Hours |
| 2. Cancer pathogenesis | 3 Hours |
| 3. Cancer genes and oncogenes | 2 Hours |
| 4. Tumor suppressor genes | 2 Hours |
| 5. Molecular diagnostics and clinical oncology | 3 Hours |
| 6. Classification and diagnosis of lymphoid malignancies | 3 Hours |
| 7. Molecular genetic abnormalities in acute and chronic leukemia | 2 Hours |
| 8. Clinical application of molecular diagnostics in hemostasis and hemotologic disorders | 5 Hours |
| 9. Hemachromatosis | 3 Hours |
| 10. Miscellaneous | 2 Hours |

I. ACTION TO BE TAKEN: CREATE A NEW COURSE

Term Effective (6 digit code only): 201401

II. PROPOSED FOR NEW COURSE: Complete all sections a through r. See manual for clarification.

a. Course Prefix: DMOL b. Number: 430 c. Enter Contact Hours per week in boxes.
LECTure 2 LAB INDEpendent Study – Check (x)
Practicum: Seminar:

d. Course Title: Molecular Hematology/Oncology (Limit to 30 characters/spaces.)

e. College Code: AH f. Department Code: CRHA
Credit Hours: Check (x) type and enter maximum and minimum hours in boxes.

g. Type: Variable Fixed h. Minimum Credit Hours 2 i. Maximum Credit Hours 2

j. May Be Repeated for Added Credit: Check (x) Yes No

k. Levels: Check (x) Undergraduate Graduate Professional

l. Grade Method: Check (x) Normal Grading Credit/No Credit only (Pass/Fail)

m. Does proposed new course replace an equivalent course? Check (x) Yes No

n. Equivalent course: Prefix Number See instructions on Replacement courses.

o. CATALOG DESCRIPTION – Limit to 75 words – PLEASE BE CONCISE.

This course will cover topics related to the molecular pathogenesis of human cancer, diagnosis of lymphoma, classification of neoplasms and genetic abnormalities in acute and chronic leukemias. This course will also cover molecular diagnostics in coagulation.

p. Term(s) Offered: Spring (See instructions for listing.) q. Max. Section Enrollment: 32

r. Prerequisites/Co-requisites/Restrictions: (If none, leave blank.) Limited to 100 spaces

Prerequisites: DMOL 410/411 grade C or better.

UCC Chair Signature/Date: _____ / / _____

Academic Affairs Approval Signature/Date: _____ / / _____

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NEW COURSE INFORMATION FORM

Course Identification:

Prefix:	Number	Title
DMOL	431	Molecular Hematology/Oncology Laboratory

Course Description:

Directed practice utilizing methodology and instrumentation commonly used in molecular hematology/oncology laboratory. Fluorescence in situ hybridization (FISH) and other techniques. Prerequisites: DMOL 410/411 grade C or better and concurrent enrollment in DMOL 430.

Course Outcomes:

This course will prepare students to:

1. Detect leukemia utilizing molecular methods
2. Detect lymphoma with molecular methods
3. Investigate emerging technologies for hematolymphoid neoplasia
4. Evaluate molecular methods used to detect thrombotic risk

Assessment Plan

1. Given a sample, 95% of the students will be able to utilize molecular methods for the detection of leukemia.
2. Given a sample, 95% of the students will be able to utilize molecular methods for the detection of lymphoma.
3. Given a method for the detection of hematolymphoid neoplasia, 95% of the students will make a presentation to the class regarding the method
4. Given a sample, 95% of the students will be able to utilize data to determine thrombotic risk.

Course Outline including Time Allocation:

1 credits (0+3) = 45 Hours

- | | |
|--|---------|
| 1. Tumor genetic anomalies | 6 Hours |
| 2. T-cell receptor genes | 6 Hours |
| 3. Non-Hodgkin lymphoma | 6 Hours |
| 4. Post therapy monitoring of residual disease | 6 Hours |
| 5. Emerging technologies in hematolymphoid neoplasia | 6 Hours |
| 6. Thrombotic Disorders | 9 Hours |
| 7. Hemachromatosis | 6 Hours |

CREATE NEW COURSE
Course Data Entry Form

Create New Course

FORM F

I. ACTION TO BE TAKEN: CREATE A NEW COURSE

Term Effective (6 digit code only):

II. PROPOSED FOR NEW COURSE:

a. Course Prefix

b. Number

c. Enter Contact Hours per week in boxes.

LECTure LAB 3 INDEpendent Study – Check (x)

Practicum: Seminar:

d. Course Title: (Limit to 30 characters/spaces.)

e. College Code:

f. Department Code:

Credit Hours: Check (x) type and enter maximum and minimum hours in boxes.

g. Type: Variable Fixed h. Minimum Credit Hours i. Maximum Credit Hours

j. May Be Repeated for Added Credit: Check (x) Yes No

k. Levels: Check (x) Undergraduate Graduate Professional

l. Grade Method: Check (x) Normal Grading Credit/No Credit only (Pass/Fail)

m. Does proposed new course replace an equivalent course? Check (x) Yes No

n. Equivalent course: Prefix Number See instructions on Replacement courses.

o. **CATALOG DESCRIPTION** – Limit to 75 words – PLEASE BE CONCISE.

Directed practice utilizing methodology and instrumentation commonly used in molecular hematology/oncology laboratory. Fluorescence in situ hybridization (FISH) and other techniques.

p. Term(s) Offered: (See instructions for listing.) q. Max. Section Enrollment:

r. **Prerequisites/Co-requisites/Restrictions: (If none, leave blank.) Limited to 100 spaces**

Prerequisites: DMOL 410/411 grade C or better and concurrent enrollment in DMOL 430.

UCC Chair Signature/Date:

Academic Affairs Approval Signature/Date:

_____/____/____

_____/____/____

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

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Date Rec'd: ____ Date Completed: ____ Entered: SCACRSE __ SCADETL __ SCARRES __ SCAPREQ

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NEW COURSE INFORMATION FORM

Course Identification:

Prefix:	Number	Title
DMOL	440	Molecular Genetics

Course Description:

This course will provide an overview of molecular genetics, genetic basis for neurologic and neuromuscular diseases, endocrine disorders, markers for cardiovascular disease, prenatal genotyping. Prerequisites: DMOL 410/411 grade C or better.

Course Outcomes:

1. Analyze genetic inheritance and its role in genetic disorders
2. Identify from a given case study, the inheritance pattern of genetic disorders
3. Explain prenatal genotyping and its use in prenatal testing

Assessment Plan:

1. Given a genetic inheritance pattern, 95% of the students will be able to determine the genetic inheritance of the offspring.
2. Given a case study, 95% of the students will be able to determine if a genetic inheritance patterns that causes disease is present
3. Given a case study, 95% of the students will be able to determine if the results might lead to a genetic disorder

Course Outline including Time Allocation

2 credits (2 + 0) = 30 Hours

- | | |
|-------------------------------|----------|
| 1. Molecular genetic testing | 5 Hours |
| 2. Principles of Inheritance | 5 Hours |
| 3. Types of Genetic Disorders | 5 Hours |
| 4. Other Genetic Disorders | 15 Hours |

CREATE NEW COURSE
Course Data Entry Form

FORM F

Create New Course

I. ACTION TO BE TAKEN: CREATE A NEW COURSE

Term Effective (6 digit code only): 201401

II. PROPOSED FOR NEW COURSE: Complete all sections a through r. See manual for clarification.

a. Course Prefix **DMOL** b. Number **440** c. Enter Contact Hours per week in boxes.
LECTure 2 LAB INDEpendent Study – Check (x)
Practicum: Seminar:

d. Course Title: **Molecular Genetics** (Limit to 30 characters/spaces.)

e. College Code: **AH** f. Department Code: **CRHA**
Credit Hours: Check (x) type and enter maximum and minimum hours in boxes.

g. Type: Variable Fixed h. Minimum Credit Hours **2** i. Maximum Credit Hours **2**

j. May Be Repeated for Added Credit: Check (x) Yes No

k. Levels: Check (x) Undergraduate Graduate Professional

l. Grade Method: Check (x) Normal Grading Credit/No Credit only (Pass/Fail)

m. Does proposed new course replace an equivalent course? Check (x) Yes No

n. Equivalent course: Prefix Number See instructions on Replacement courses.

o. CATALOG DESCRIPTION – Limit to 75 words – PLEASE BE CONCISE. This course will provide an overview of molecular genetics, genetic basis for neurologic and neuromuscular diseases, endocrine disorders, markers for cardiovascular disease, prenatal genotyping.

p. Term(s) Offered: **Spring** (See instructions for listing.) q. Max. Section Enrollment: **32**

r. Prerequisites/Co-requisites/Restrictions: (If none, leave blank.) Limited to 100 spaces
Prerequisites: DMOL 410/411 grade C or better.

UCC Chair Signature/Date:
_____ / /

Academic Affairs Approval Signature/Date:
_____ / /

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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Date Rec'd: _____ Date Completed: _____ Entered: SCACRSE __ SCADETL __ SCARRES __ SCAPREQ
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NEW COURSE INFORMATION FORM

Course Identification:

Prefix:	Number	Title
DMOL	441	Molecular Genetics Laboratory

Course Description:

Directed practice utilizing methodology and instrumentation commonly used in molecular genetics laboratory.

Prerequisites: DMOL 410/411 grade C or better and concurrent enrollment in DMOL 440.

Course Outcomes:

This course will prepare students to:

1. Identify Fragile X by utilizing molecular methods
2. Utilize molecular methods for the detection of cystic fibrosis
3. Utilize molecular methods for prenatal testing for genetic disorders
4. Evaluate methods used in the detection of endocrine disorders and cardiovascular disease

Assessment Plan:

1. Given a sample, 95% of the students will be able to analyze the sample for the detection of Fragile X.
2. Given a sample, 95% of the students will be able to analyze the sample of the detection of cystic fibrosis.
3. Given a sample, 95% of the students will be able to analyze the sample for prenatal genetic disorders.
4. Given a case study, 95% of the students will be able to detect if a endocrine disorder or cardiovascular disease is present.

Course Outline including Time Allocation

1 credits (0+3) = 45 Hours

- | | |
|---|----------|
| 1. Neuromuscular diseases | 18 Hours |
| 2. Prenatal Genotyping | 6 Hours |
| 3. Endocrine disorders | 6 Hours |
| 4. Cardiovascular disease | 9 Hours |
| 5. Hemoglobinopathies and other hemotologic disorders | 3 Hours |
| 6. Other genetic diseases | 3 Hours |

CREATE NEW COURSE

Course Data Entry Form

Create New Course

FORM F

I. ACTION TO BE TAKEN: CREATE A NEW COURSE

Term Effective (6 digit code only):

II. PROPOSED FOR NEW COURSE: Complete all sections a through r, See manual for clarification.

a. Course Prefix b. Number c. Enter Contact Hours per week in boxes.
LECTure LAB 3 INDEPENDENT Study – Check (x)
Practicum: Seminar:

d. Course Title: (Limit to 30 characters/spaces.)

e. College Code: f. Department Code:
Credit Hours: Check (x) type and enter maximum and minimum hours in boxes.

g. Type: Variable Fixed h. Minimum Credit Hours i. Maximum Credit Hours

j. May Be Repeated for Added Credit: Check (x) Yes No

k. Levels: Check (x) Undergraduate Graduate Professional

l. Grade Method: Check (x) Normal Grading Credit/No Credit only (Pass/Fail)

m. Does proposed new course replace an equivalent course? Check (x) Yes No

n. Equivalent course: Prefix Number See instructions on Replacement courses.

o. CATALOG DESCRIPTION – Limit to 75 words – PLEASE BE CONCISE.

Directed practice utilizing methodology and instrumentation commonly used in molecular genetics laboratory.

p. Term(s) Offered: (See instructions for listing.) q. Max. Section Enrollment:

r. Prerequisites/Co-requisites/Restrictions: (If none, leave blank.) Limited to 100 spaces

Prerequisites: DMOL 410/411 grade C or better and concurrent enrollment in DMOL 440.

UCC Chair Signature/Date:

Academic Affairs Approval Signature/Date:

_____/_____/____

_____/_____/____

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

Office of the Registrar use ONLY

Date Rec'd: ____ Date Completed: ____ Entered: SCACRSE __ SCADETL __ SCARRES __ SCAPREQ

NEW COURSE INFORMATION FORM

Course Identification:

Prefix:	Number	Title
DMOL	450	Molecular Forensics/Identity Based Testing

Course Description:

This course will provide an overview of HLA typing, forensic casework, parentage testing, bone marrow transplant engraftment and use of DNA for identity testing. Prerequisites: DMOL 410/411 grade C or better.

Course Outcomes:

This course will prepare students to:

1. Examine parentage testing and its use in clinical diagnosis
2. Investigate bone marrow transplant engraftment analysis
3. Identify molecular methods utilized in HLA typing
4. Identify molecular methods used in forensic case work and parentage testing

Assessment Plan:

1. Given results of a tumor biopsy, 95% of the students will be able to identify the origin of tumor.
2. Given simulated bone marrow results from a recipient and donor, 95% of the students will be able to identify if recipient's transplant has been successful.
3. Given a solid organ case study, 95% of the students will be able to determine if the organ is a match to the recipient.
4. Given a electrophoretic pattern, 95% of the students will be able to determine if the pattern is from the suspect or the victim.

Course Outline including Time Allocation:

2 credits (2 + 0) = 30 Hours

1. Identity testing and forensic DNA analysis	5 Hours
2. Parentage testing	5 Hours
3. Bone marrow transplant engraftment	5 Hours
4. The major histocompatibility complex	5 Hours
5. Forensic casework and parentage testing	10 Hours

I. ACTION TO BE TAKEN: CREATE A NEW COURSE

Term Effective (6 digit code only):

II. PROPOSED FOR NEW COURSE: Complete all sections a through r, See manual for clarification.

a. Course Prefix b. Number c. Enter Contact Hours per week in boxes.
 LECTure 2 LAB INDEpendent Study – Check (x)
 Practicum: Seminar:

d. Course Title: (Limit to 30 characters/spaces.)

e. College Code: f. Department Code:
Credit Hours: Check (x) type and enter maximum and minimum hours in boxes.

g. Type: Variable Fixed h. Minimum Credit Hours i. Maximum Credit Hours

j. May Be Repeated for Added Credit: Check (x) Yes No

k. Levels: Check (x) Undergraduate Graduate Professional

l. Grade Method: Check (x) Normal Grading Credit/No Credit only (Pass/Fail)

m. Does proposed new course replace an equivalent course? Check (x) Yes No

n. Equivalent course: Prefix Number See instructions on Replacement courses.

o. CATALOG DESCRIPTION – Limit to 75 words – PLEASE BE CONCISE.

This course will provide an overview of HLA typing, forensic casework, parentage testing, bone marrow transplant engraftment and use of DNA for identity testing.

p. Term(s) Offered: (See instructions for listing.) q. Max. Section Enrollment:

r. Prerequisites/Co-requisites/Restrictions: (If none, leave blank.) Limited to 100 spaces

Prerequisites: DMOL 410/411 grade C or better.

UCC Chair Signature/Date:

Academic Affairs Approval Signature/Date:

_____/____/____

_____/____/____

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

Office of the Registrar use ONLY

Date Rec'd: ____ Date Completed: ____ Entered: SCACRSE __ SCADETL __ SCARRES __ SCAPREQ

FORM E

NEW COURSE INFORMATION FORM

Course Identification:

Prefix:	Number	Title
DMOL	451	Molecular Forensics/Identity Based Testing Laboratory

Course Description:

Directed practice utilizing methodology and instrumentation that are commonly used in molecular forensics and identity based testing laboratories. Case studies of bone marrow graft transplant will be discussed and reviewed. Prerequisites: DMOL 410/411 grade C or better and concurrent enrollment in DMOL 450.

Course Outcomes:

This course will prepare students to:

1. Perform molecular applications used in identity and parentage testing
2. Utilize human leukocyte antigen (HLA) methods to determine compatibility of organ transplants
3. Analyze results used in bone marrow transplants
4. Analyze specimen types and determine which methods should be utilized in paternity testing

Assessment Plan:

1. Given a blood sample, 95% of the students will utilize parentage testing to determine the origin of the tumor.
2. Given simulated test results, 95% of the students will be able to determine if the organ is compatible.
3. Given a sample, 95% of the students will be able to determine if the transplant was successful.
4. Given a sample, 95% of the students will be able to determine which method should be utilized for paternity testing.

Course Outline including Time Allocation:

1 credits (0+3) = 45 Hours

- | | |
|--|------------|
| 1. Applications used in identity and parentage testing | 12 Hours |
| 2. HLA applications | 12 Hours |
| 3. Engraftment testing using DNA polymorphisms | 10.5 Hours |
| 4. Future directions in paternity testing | 10.5 Hours |

I. ACTION TO BE TAKEN: CREATE A NEW COURSE

Term Effective (6 digit code only): 201401

II. PROPOSED FOR NEW COURSE: Complete all sections a through r, See manual for clarification.

a. Course Prefix **DMOL** b. Number **451** c. Enter Contact Hours per week in boxes.
LECTure LAB 3 INDEpendent Study – Check (x)
Practicum: Seminar:

d. Course Title: **Molecular Forensics/Identity Based Testing Laboratory** (Limit to 30 characters/spaces.)

e. College Code: **AH** f. Department Code: **CRHA**
Credit Hours: Check (x) type and enter maximum and minimum hours in boxes.

g. Type: Variable Fixed h. Minimum Credit Hours **1** i. Maximum Credit Hours **1**

j. May Be Repeated for Added Credit: Check (x) Yes No

k. Levels: Check (x) Undergraduate Graduate Professional

l. Grade Method: Check (x) Normal Grading Credit/No Credit only (Pass/Fail)

m. Does proposed new course replace an equivalent course? Check (x) Yes No

n. Equivalent course: Prefix Number See instructions on Replacement courses.

o. CATALOG DESCRIPTION – Limit to 75 words – PLEASE BE CONCISE.

Directed practice utilizing methodology and instrumentation that are commonly used in molecular forensics and identity based testing laboratories. Case studies of bone marrow graft transplant will be discussed and reviewed.

p. Term(s) Offered: **Spring** (See instructions for listing.) q. Max. Section Enrollment: **16**

r. Prerequisites/Co-requisites/Restrictions: (If none, leave blank.) Limited to 100 spaces

Prerequisites DMOL 410/411 grade C or better and concurrent enrollment in DMOL 450.

UCC Chair Signature/Date: _____ / /

Academic Affairs Approval Signature/Date: _____ / /

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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Date Rec'd: _____ Date Completed: _____ Entered: SCACRSE __ SCADETL __ SCARRES __ SCAPREQ

NEW COURSE INFORMATION FORM

Course Identification:

Prefix:	Number	Title
DMOL	460	Management and Regulation in Molecular Diagnostics

Course Description:

This course will cover the framework for quality assurance, quality system essentials, instrument maintenance, calibration and verification of molecular assays. Standards and guidelines set by the College of American Pathologists (CAP), Clinical and Laboratory Standards Institute (CLSI) and the Centers for Disease Control and Prevention (CDC) will be discussed. Proficiency testing and lab design will also be covered.

Prerequisites: DMOL 420/421, DMOL 430/431, DMOL 440/441 and DMOL 450/451.

Course Outcomes:

This course will prepare students to:

1. Examine quality control results and determine the limits of acceptability
2. Evaluate an instrument preventative maintenance program
3. Examine a calibration report from an instrument used in a molecular laboratory
4. Construct a quality program utilizing quality system essentials
5. Utilize Clinical Laboratory and Standards Institute (CLSI), CDC and CAP guidelines and standards to design and validate a molecular test

Assessment Plan:

1. Given a sample of quality control results, 95% of the students will be able to determine if the results show trends or shifts.
2. Given an instrument preventative maintenance program, 95% of the students will be able to evaluate to ensure accurate documentation.
3. Given a calibration report, 95% of the students will be able interpret if the report is valid.
4. Given a quality system essential topic, 95% of the students will be able to construct a quality program.
5. Given an organism, 95% of the students will utilize CLSI, CAP and CDC to design and validate a molecular test.

Course Outline including Time Allocation:

2 credits (2 + 0) = 30 Hours

1. Quality assurance	3 Hours
2. Instrument maintenance	5 Hours
3. Calibration	5 Hours
4. Proficiency testing	5 Hours
5. Quality management program	5 Hours
6. Compliance	2 Hours
7. Laboratory design	3 Hours
8. Getting involved in national societies	2 Hours

CREATE NEW COURSE

Course Data Entry Form

Create New Course

FORM F

I. ACTION TO BE TAKEN: CREATE A NEW COURSE

Term Effective (6 digit code only):

II. PROPOSED FOR NEW COURSE: Complete all sections a through r, See manual for clarification.

a. Course Prefix b. Number c. Enter Contact Hours per week in boxes.
LECTure 2 LAB INDEpendent Study – Check (x)
Practicum: Seminar:

d. Course Title: (Limit to 30 characters/spaces.)

e. College Code: f. Department Code:
Credit Hours: Check (x) type and enter maximum and minimum hours in boxes.

g. Type: Variable Fixed h. Minimum Credit Hours i. Maximum Credit Hours

j. May Be Repeated for Added Credit: Check (x) Yes No

k. Levels: Check (x) Undergraduate Graduate Professional

l. Grade Method: Check (x) Normal Grading Credit/No Credit only (Pass/Fail)

m. Does proposed new course replace an equivalent course? Check (x) Yes No

n. Equivalent course: Prefix Number See instructions on Replacement courses.

o. CATALOG DESCRIPTION – Limit to 75 words – PLEASE BE CONCISE.

This course will cover the framework for quality assurance, quality system essentials, instrument maintenance, calibration and verification of molecular assays. Standards and guidelines set by the College of American Pathologists (CAP), Clinical and Laboratory Standards Institute (CLSI) and the Centers for Disease Control or Prevention (CDC) will be discussed. Proficiency testing and lab design will also be covered.

p. Term(s) Offered: (See instructions for listing.) q. Max. Section Enrollment:

r. Prerequisites/Co-requisites/Restrictions: (If none, leave blank.) Limited to 100 spaces

Prerequisites: DMOL 410/411, DMOL 420/421, DMOL 430/431, DMOL 440/441 and DMOL 450/451.

UCC Chair Signature/Date:

Academic Affairs Approval Signature/Date:

_____/____/____

_____/____/____

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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Date Rec'd: ____ Date Completed: ____ Entered: SCACRSE __ SCADETL __ SCARRES __ SCAPREQ

NEW COURSE INFORMATION FORM

Course Identification:

Prefix:	Number	Title
DMOL	491	Molecular Diagnostics Internship

Course Description:

This course requires the student to demonstrate previously learned knowledge to: Application of theories and techniques in molecular diagnostics with an emphasis on correlation of test results and problem solving skills in a clinical laboratory setting for 12 weeks. Prerequisites DMOL 420/421, DMOL 430/431, DMOL 440/441 and DMOL 450/451.

Course Outcomes:

1. Perform appropriate techniques utilizing instrumentation and information management systems for molecular methods
2. Correlate disease states with results acquired from molecular test results
3. Analyze various blood and body fluids utilizing molecular methods
4. Explain the importance of communication in the work place

Assessment Plan:

1. Given an unknown sample, 95% of the students will be able to identify the organism or genetic disorder with no assistance.
2. Given a sample, 95% of the students will determine the organism or genetic disorder and identify the disease state of the patient.
3. Given unknown samples, 95% of the students will be able to process blood and body fluids for molecular analysis with no assistance.
4. Given a communication work place issue, 95% of the students will be able to develop a plan on how the situation should have been handled.

Course Outline including Time Allocation:

6 credits (6+0) = 12 x 40 = 480 hours

Students will rotate through several sections of the molecular diagnostic laboratory. Time spent in each section will be determined by the laboratory but objectives provided by the program will be utilized to ensure each student is held to the same standards in preparation for the national certification exam.

I. ACTION TO BE TAKEN: CREATE A NEW COURSE

Term Effective (6 digit code only):

II. PROPOSED FOR NEW COURSE: Complete all sections a through r, See manual for clarification.

a. Course Prefix b. Number c. Enter Contact Hours per week in boxes.
LECTure LAB INDEpendent Study – Check (x)
Practicum: Seminar:

d. Course Title: (Limit to 30 characters/spaces.)

e. College Code: f. Department Code:
Credit Hours: Check (x) type and enter maximum and minimum hours in boxes.

g. Type: Variable Fixed h. Minimum Credit Hours i. Maximum Credit Hours

j. May Be Repeated for Added Credit: Check (x) Yes No

k. Levels: Check (x) Undergraduate Graduate Professional

l. Grade Method: Check (x) Normal Grading Credit/No Credit only (Pass/Fail)

m. Does proposed new course replace an equivalent course? Check (x) Yes No

n. Equivalent course: Prefix Number See instructions on Replacement courses.

o. CATALOG DESCRIPTION – Limit to 75 words – PLEASE BE CONCISE.

This course requires the student to demonstrate previously learned knowledge to:
Application of theories and techniques in molecular diagnostics with an emphasis on correlation of test results and problem solving skills in a clinical laboratory setting for 12 weeks.

p. Term(s) Offered: (See instructions for listing.) q. Max. Section Enrollment:

r. Prerequisites/Co-requisites/Restrictions: (If none, leave blank.) Limited to 100 spaces
Prerequisites DMOL 420/421, DMOL 430/431, DMOL 440/441 and DMOL 450/451.

UCC Chair Signature/Date: _____ / /

Academic Affairs Approval Signature/Date: _____ / /

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

Office of the Registrar use ONLY

Date Rec'd: ____ Date Completed: ____ Entered: SCACRSE __ SCADETL __ SCARRS __ SCAPREQ

NEW COURSE INFORMATION FORM

Course Identification:

Prefix:	Number	Title
DMOL	499	Molecular Diagnostics Seminar

Course Description:

A course assessing students' comprehension of molecular diagnostics and general education concepts, which will be accomplished through papers, projects, and examinations. This is a capstone course for the Molecular Diagnostics program. Prerequisites: DMOL 420/421, DMOL 430/431, DMOL 440/441 and DMOL 450/451.

Course Outcomes:

This course will prepare students to:

1. Identify a case study that could be published in a peer reviewed journal or as an abstract at a molecular society meeting. This case study will also be presented by the student to the internship site management team.

Assessment Plan:

1. Utilizing the results and patient data, 100% of the students will present the case to the clinical internship management team. Based on the results the management team will decide if the case study should be published in a peer reviewed journal or presented as an abstract at a molecular society meeting.

Course Outline including Time Allocation:

1 credits (1+0) = 15 Hours

- | | |
|---|---------|
| 1. Identify an interesting molecular diagnostics case. | 2 Hours |
| 2. Review literature and discuss the issues in an abstract format to be approved by the program director. | 5 Hours |
| 3. Develop a plan for investigation of the issue and potential resolutions. | 3 Hours |
| 4. Present resolution as a poster or abstract at a professional meeting or to the management team at the internship site. | 2 Hours |
| 5. Peer evaluation and feedback on presentation. | 2 Hours |
| 6. Reflect and discuss topics among peers. | 1 Hour |

CREATE NEW COURSE

Course Data Entry Form

Create New Course

FORM F

I. ACTION TO BE TAKEN: CREATE A NEW COURSE

Term Effective (6 digit code only):

II. PROPOSED FOR NEW COURSE: Complete all sections a through r, See manual for clarification.

a. Course Prefix b. Number c. Enter Contact Hours per week in boxes.
 LECTure LAB INDEpendent Study – Check (x)
 Practicum: Seminar:

d. Course Title: (Limit to 30 characters/spaces.)

e. College Code f. Department Code:
Credit Hours: Check (x) type and enter maximum and minimum hours in boxes.

g. Type: Variable Fixed h. Minimum Credit Hours i. Maximum Credit Hours

j. May Be Repeated for Added Credit: Check (x) Yes No

k. Levels: Check (x) Undergraduate Graduate Professional

l. Grade Method: Check (x) Normal Grading Credit/No Credit only (Pass/Fail)

m. Does proposed new course replace an equivalent course? Check (x) Yes No

n. Equivalent course: Prefix Number See instructions on Replacement courses.

o. CATALOG DESCRIPTION – Limit to 75 words – PLEASE BE CONCISE.

A course assessing students' comprehension of molecular diagnostics and general education concepts, which will be accomplished through papers, projects, and examinations. This is a capstone course for the Molecular Diagnostics program.

p. Term(s) Offered: (See instructions for listing.) q. Max. Section Enrollment:

r. Prerequisites/Co-requisites/Restrictions: (If none, leave blank.) Limited to 100 spaces

Prerequisites DMOL 420/421, DMOL 430/431, DMOL 440/441 and DMOL 450/451.

UCC Chair Signature/Date:

Academic Affairs Approval Signature/Date:

_____/_____/____

_____/_____/____

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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Date Rec'd: ____ Date Completed: ____ Entered: SCACRSE __ SCADETL __ SCARRES __ SCAPREQ

Special Emphasis with Degree/Program: None

Other Considerations: None

Expected Implementation Date: Fall 2010. DMOL 110 and DMOL 210 will be offered fall 2010 for the students enrolled in the Kent County Intermediate School District Science Academy.

Articulation: This program is expected to accept students from community colleges and universities who meet the criteria for admission to the professional phase. Articulation agreements will be established with community colleges to facilitate the movement of students into the program.

Accreditation: The program has been designed to meet the Diagnostic Molecular Scientist standards of the National Accrediting Agency for Clinical Laboratory Science (NAACLS). The program must be accredited by NAACLS in order for students to sit for the national certification exam. The program will provide a self study to NAACLS Fall 2011. NAACLS will evaluate the program after the first class graduates which will be in 2014.

Licensure/Certification: The program will follow the guidelines supplied by the ASCP to ensure students will be prepared for the molecular pathology (MP)ASCP certification exam.

NEED FOR THE PROPOSED DEGREE/PROGRAM

Offerings by Neighboring Institutions

There are two programs in the state of Michigan that offer molecular diagnostics. The first program is located at Michigan State University (MSU). The biomedical laboratory diagnostics program at MSU offers a post bachelor of science certificate in molecular laboratory diagnostics and a bachelor of science in molecular diagnostics. The other program is offered at Northern Michigan University (NMU) where the genetics major offers two tracks cytogenetics and molecular biology. The NMU program is accompanied by a lengthy internship taught at affiliates such as Mayo Clinica and the Marshfield Clinic. There are a total of seven accredited programs in the nation, two of which are hospital based. Enrollment in the other programs is difficult to determine, however, discussions with the program personnel indicates that enrollment is fewer than 20 students per year per program

Identify Differences

Courses offered in the proposed program such as infectious disease, hematology/oncology, molecular forensics/identity testing and molecular genetics are unique to any of the programs that were researched. The student will be prepared to apply laboratory results to real patient scenarios correlating simulated patient data with a preliminary diagnosis. Internship sites have been contacted and prefer that the students are prepared with a good foundation of theory prior to their assignment to the clinical setting because affiliates do not have the resources to train students in theory.

Relationship to Current University Programs

The proposed program will utilize courses from the Clinical Laboratory Science programs but will specialize in courses that teach the student how to denature, hybridize and amplify DNA to aid in the diagnosis of disease. The students will also apply these methods to disease states in some instances correlate the results of the molecular methods to traditional laboratory methods. To a lesser extent the program contains some of the same courses as the Biotechnology program i.e. cell biology, bioinformatics and principles of genetics. While the prerequisites are similar to the biotechnology and applied biology in pre-profession state, the molecular diagnostics program focuses on laboratory methods and techniques utilized in detection of disease or predisposition of disease.

COMPILE DATA COLLECTED REGARDING DEMAND BY EMPLOYERS, PROFESSION, INDUSTRY

Expected Number of Majors

The proposed program will accept 24 students into the program for the first two years and 32 additional students each year thereafter. This number was determined by the number of clinical sites that will be available and the number of students the teaching labs will be able to accommodate.

Sequence Start	Number of Pre-Professional Students	Number of Professional Students
Fall Semester 2010	24	0
Fall Semester 2011	48	0
Fall Semester 2012	80	24
Fall Semester 2013	112	48
Fall Semester 2014	120	80
Fall Semester 2015	128	112

State and National Trends

United States	Employment		Percent Change	Job Openings ¹
	2006	2016		
Medical and clinical laboratory technologists	167,200	188,000	+ 12 %	4,600
Michigan	Employment		Percent Change	Job Openings ¹
	2006	2016		
Medical and clinical laboratory technologists	4,990	5,280	+ 6 %	100

¹Job Openings refers to the average annual job openings due to growth and net replacement. Data acquired from Career InfoNet 2009.

Projections data from the National Employment Matrix

Occupational title	SOC Code	Employment, 2006	Projected employment, 2016	Change, 2006-16		Detailed statistics
				Number	Percent	
Clinical laboratory technologists and technicians	29-2010	319,000	362,000	43,000	14	PDF zipped XLS
Medical and clinical laboratory technologists	29-2011	167,000	188,000	21,000	12	PDF zipped XLS
Medical and clinical laboratory technicians	29-2012	151,000	174,000	23,000	15	PDF zipped XLS

NOTE: Data in this table are rounded. See the discussion of the employment projections table in the *Handbook* introductory chapter on *Occupational Information Included in the Handbook*.

Bureau of Labor and Statistics 2009

EXISTING/ADDITIONAL SUPPORT AND RESOURCES

Faculty

A full time program director with a master's in clinical laboratory science, molecular pathology, cytogenetics or other science related discipline will need to be hired. This individual must also hold certification through ASCP either MT(ASCP) or MP(ASCP) and have at least three years of experience in education per NAACLS guidelines. A molecular diagnostics coordinator will need to be added to assist with preparation of the teaching labs and maintenance of instrumentation and equipment. This individual will also be responsible for coordinating internships, assisting with community college recruitment events, visiting students on internship and teaching courses in the curriculum. Additional adjunct faculty will need to be pursued for any education gaps.

Facilities

The proposed program will require a teaching laboratory that has the capability of offering a designated “clean room” where the students can extract DNA without external DNA contamination. This lab will also need to have a section that is separate from the clean room. The students will also require access to a dark room for Fluorescence In Situ Hybridization (FISH) techniques. This dark room is very small but should be able to accommodate a couple of students and a faculty member. Lectures will be conducted in a classroom setting and will need to accommodate thirty two students and a faculty member. The labs will need to accommodate 16 students and a faculty member. Lockers will be needed so students can store their personal belongings while they are in the teaching laboratory.

Library Resources

Refer to form C

Equipment, Computers

Budget Implication of Curriculum Changes

	Start-up	After Three Years
Supply and expense	\$150,000	\$150,000
Equipment	\$600,000	\$50,000
Full-time faculty	\$80,000	\$160,000
Overload/adjunct faculty	\$	\$30,000
Other		\$2500 accreditation fee

Program Marketing and Recruitment

Community college students will be heavily recruited in addition to local high schools in the Grand Rapids, Ann Arbor, Traverse City and Detroit. The Midwest region will also be considered for recruitment as the Cleveland Clinic and Mayo Clinic are interested in offering internship sites and may have employees interested in the program.

Revised 05/08/2009

PROPOSAL SUMMARY AND ROUTING FORM

Proposal Title: Associates in Dietary and Food Service Management

Initiating Unit or Individual: SEHM/COB & Allied Health

Contact Person's Name: Julie A. Doyle, Ellen Hanneline e-mail: doylej@ferris.edu, hanneline@ferris.edu

phone: x 2385, x 2269

Date or Term of Proposal Implementation: Fall 2010

Group I - A – New degree/major or major, redirection of a current offering, or elimination of a degree, major or minor

Group I - B – New minors or concentrations

Group II - A – Minor curriculum clean-up and course changes

Group II - B – New Course

Group III - Certificates

Group IV – Off-Campus Programs

Group/Individual	Signature	Date	Vote/Action *
Program Faculty	<i>Julie Doyle</i>	11/23/09	<u>2</u> Support ___ Support with Concerns ___ Not Support
Department Faculty	<i>Ellen Hanneline</i>	11-25-09	<u>✓</u> Support ___ Support with Concerns ___ Not Support
Department Head	<i>Matthew East</i>	11-25-09	<u>✓</u> Support ___ Support with Concerns ___ Not Support
College Curriculum Committee	<i>Anita Fagerman</i>	12-20-09	<u>4</u> Support <u>2</u> * Support with Concerns <u>0</u> Not Support
Dean	<i>John ...</i> <i>*All Concerns Addressed Successfully!</i>	1/13/10	<u>✓</u> Support ___ Support with Concerns ___ Not Support
University Curriculum Committee	<i>NOTHING FURTHER NEEDS BE DONE</i>		___ Support ___ Support with Concerns ___ Not Support
Senate			___ Support ___ Support with Concerns ___ Not Support
Academic Affairs			___ Support ___ Support with Concerns ___ Not Support

* Support with Concerns or Not Support must include a list of specific concerns. Votes must be shown for faculty groups. Administrators check appropriate action taken.

To be completed by Academic Affairs		
President (Date Approved) _____	Board of Trustees (Date Approved) _____	President's Council (Date Approved) _____

1. Proposal Summary

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

Because of growth in both acute and long-term care facilities there is a large need for individuals trained to provide nutrition services. These individuals would be primarily responsible for running the food service operation on a daily basis. They would also provide patient services under the supervision of a Registered Dietician. In the proposed program students will study basic nutrition, facilities design, menu planning, basic food production, sanitation procedures, purchasing, human resources and cost control as well as nutrition assessment and diet therapy. Students will be required to complete 400 hours of supervised clinical experience. Upon successful completion of the associates degree students will be eligible, and prepared, to take the certification exam for the Certified Dietary Manager (CDM) through the Dietary Managers Association (DMA).

2. Summary of All Course Action Required*

a. Newly Created Courses to FSU:

Prefix	Number	Title
CAHS	122	Nutrition
CAHS	261	Certification Prep
CAHS	222	Management of Patient Nutritional Care

b. Courses to be Deleted From FSU Catalog:

Prefix	Number	Title
--------	--------	-------

c. Existing Course(s) to be Modified:

d. Addition of existing FSU courses to program

Prefix	Number	Title
RFIM	101	Orientation to Hospitality Industry
RFIM	113	Sanitation and Safety
RFIM	115	Food and Labor Cost Control Systems
RFIM	211	Purchasing: Hospitality Industry
RFIM	127	Principles of Cooking & Baking
RFIM	292	Restaurant and Food Industry Internship
RFIM	214	Equipment, Layout & Design
MRIS	102	Medical Terminology
ACCT	201	Principles of Accounting
MGMT	301	Applied Management
CAHS	160	Nutrition for Healthy Living
Science		Scientific Understanding with lab
ECON	221	Principles of Economics
Cultural	Enrichment	Elective

MATH	117	Contemporary Mathematics
COMM	105	Interpersonal Communications
ENGL	150	English 1
ENGL	250	English 2
HCSA	335	Supervisory Prac HC Workers

e. Removal of existing FSU courses from program

Prefix	Number	Title
--------	--------	-------

3. Summary of All Consultations

Form Sent (B or C)	Date Sent	Responding Dept.	Date Received & by Whom
B	10/22/09	AFIS Department	10/24/09 Jim Woolen
B	10/22/09	Lang & Lit Department	10/24/09 Nathan Garrelts
B	10/27/09	Medical Records	10/29/09 Greg Zimmerman
B	10/27/09	Allied Health	10/27/09 Ellen Haneline
B	10/22/09	Mathematics Department	10/24/09 Kirk Weller
B	10/22/09	Management Department	10/24/09 David Steenstra
B	10/22/09	Humanities Department	10/24/09 Grant Snider
B	09/15/09	SEHM Department	9/17/09 Matt Pinter

4. Will External Accreditation be Sought? (For new programs or certificates only)

Yes No

If yes, name the organization involved with accreditation for this program.
 Dietary Managers Association <http://www.dmaonline.org/>

5. Program Check sheets affected by this proposal.
 None, new one developed.

Dietary Food Service Management End of Program Outcomes

The overall objective of the Dietary Food Service Management Program is to prepare graduates for employment within the healthcare industry . This program includes the opportunity to become certified as a CDM, Certified Dietary Manager. Graduates will work together with registered dietitians to provide quality nutritional care for clients in a variety of non-commercial settings.

To this end, students who complete the Dietary Food Service Management Program will possess the ability to:

- Gather and apply nutrition data and provide nutritional education to patients, clients, and caregivers.
- Provide food services to include meal service, preparation, service of special nourishments and supplemental feedings, and selective menus.
- Manage departmental personnel using effective communication, proper selection, adequate training, maintaining records, using acceptable disciplinary procedures and adhering to legal standards.
- Manage supplies, equipment use, sanitation, and safety using HACCP Guidelines and ensuring compliance regulations
- Manage production and business operations to include purchase specifications, cash activities and reports, budgets and cost-effective procedures.

Assessment Plan

Graduates will pass the national credentialing examination at a rate equal to or greater than the national average.

www.dmaonline.org



Julie A Doyle
 <doylej@ferris.edu>
 12/23/2009 09:37 AM

To AnitaFagerman@ferris.edu
 cc Julie_Doyle@ferris.edu, Lianne_Briggs@ferris.edu,
 Annette_Keyt@ferris.edu, LynnaeSelberg@ferris.edu
 bcc

Subject Re: CCC Proposal Results: AY2009-2010 #08

Anita, we definately want to have this as a Fall 2010 Implementation!

To respond to the committees Q:
 The Proposal needs to address the concerns of the AFIS and Math Departments.

1. The concern/modification indicated by the Math Department is to clarify the math requirement on Form D (the check sheet).

The Math required to prepare these degree seeking students for certification as a Certified Dietary Food Services Manager are the learning outcomes of the MATH 117 course. As stated MATH 116 or MATH 115 would be accepted. Annette Keyt, Dept. Secretary will make the updated change to read the math requirements of ACT and HS pre requ's.

AIFS Concern:

Since this is a partnership degree with the College of Allied Health, COB ASBSP accreditation is not necessary for this degree, as in other degrees in the COB.

I believe that this should take care of the concerns. If not, please let us know asap! We are very excited to be able to offer this degree in Fall 2010 as we have students already waiting.

JD

AnitaFagerman@ferris.edu wrote:

>
 >
 >
 >
 > Hi All,
 >
 > Here's the final CCC vote on Proposal 8:
 >
 > Proposal AY2009-2010 #08 Associates in Dietary and Food Service
 > Management
 >
 > 4 - support; 2 - support with concerns; 0 - do not support.
 > Concerns:
 > The Proposal needs to address the concerns of the AFIS and Math
 > Departments.
 > The concern/modification indicated by the Math Department is to
 > clarify the math requirement on Form D (the check sheet).
 > The concern/modification indicated by the AFIS Department is to
 > address the COB Accreditation Requirements. The ASBSP standard for
 > accreditation of Associate Degrees for Business schools is located
 > at <http://www.acbsp.org/download.php?sid=15> Of specific focus is
 > how the Associates degree addresses curriculum elements of
 > Standard 6 listed on pages 27-30 involving Criterion 6.2
 > (Professional Component), Criterion 6.3 (General Education

1/13/2010 - See Dean Note - Form A
 Concerns = Fully addressed.

- > Component), and Criterion 6.4 (Business Major Component). The
- > Proposal should clarify these requirements are met.
- > Is the AFIS Department Form B note relevant regarding not enough credit
- > hours in the business core for ACBSP standards and an AAS degree
- > (needs 15, has 6)?
- > Should the proposal still note a Spring 2010 implementation?
- >
- > Anita



Anita Fagerman/FSU
12/21/2009 11:27 AM

To Annette Keyt/FSU@Ferris
cc
bcc

Subject Re: CCC Proposal Results: AY2009-2010 #08

History: This message has been replied to.

pst...Annette, when moving the Proposal on to the Dean and beyond just make the fall 2010 change in the proposal and that will address Jim Jone's implementation question.

Anita

-----Annette Keyt/FSU wrote: -----

To: Anita Fagerman/FSU@FERRIS
From: Annette Keyt/FSU
Date: 12/21/2009 08:27AM
Subject: Re: CCC Proposal Results: AY2009-2010 #08

Fall 2010 implementation.

Annette L. Keyt
Professional Golf Management
231 591 2380
Anita Fagerman/FSU

Anita
Fagerman/FSU

ToAnnette Keyt/FSU@Ferris

ccJulie Doyle/FSU@Ferris, Lianne B Briggs/FSU@Ferris, Lynnae Selberg/FSU@FERRIS

12/20/2009 07:59 PM

SubjectCCC Proposal Results: AY2009-2010 #08

Hi All,

Here's the final CCC vote on Proposal 8:

Proposal AY2009-2010 #08 Associates in Dietary and Food Service Management

4 – support; 2 – support with concerns; 0 – do not support.

Concerns:

The Proposal needs to address the concerns of the AFIS and Math Departments.

The concern/modification indicated by the Math Department is to clarify the math requirement on Form D (the check sheet).

The concern/modification indicated by the AFIS Department is to address the COB Accreditation Requirements. The ASBSP standard for accreditation of Associate Degrees for Business schools is located at <http://www.acbsp.org/download.php?sid=15> Of specific focus is how the Associates degree addresses curriculum elements of Standard 6 listed on pages 27-30 involving Criterion 6.2 (Professional Component), Criterion 6.3 (General Education Component), and Criterion 6.4 (Business Major Component). The Proposal should clarify these requirements are met.

Is the AFIS Department Form B note relevant regarding not enough credit hours in the business core for ACBSP standards and an AAS degree (needs 15, has 6)?

Should the proposal still note a Spring 2010 implementation?

Anita

Table of Contents

Item Description	Item
Proposal Summary and Routing Form	Form A
Curriculum Consultation Form - AFIS	Form B
Curriculum Consultation Form - Lang and Lit	Form B
Curriculum Consultation Form - Medical Records	Form B
Curriculum Consultation Form – Allied Health	Form B
Curriculum Consultation Form – Mathematics	Form B
Curriculum Consultation Form – Management	Form B
Curriculum Consultation Form – Humanities	Form B
Curriculum Consultation Form – SEHM	Form B
Flite Services Consultation Form	Form C
Proposed Dietary and Food Service Management Checksheet	Form D
CAHS 122 Management of Patient Dietary Needs NEW	Form E
CAHS222 Patient Services NEW	Form E
CAHS261 Dietary Manager Certification Preparation NEW	Form E
CAHS122 Management of Patient Dietary Needs NEW	Form F
CAHS222 Patient Services NEW	Form F
CAHS261 Dietary Manager Certification Preparation NEW	Form F

1. Name of degree, major, concentration, certificate, or minor. Briefly describe the curriculum plan/template.

Associates of Applied Science in Dietary Foodservice Management.

2. Target date for implementation.

Fall 2010

3. Briefly explain the rationale for this initiative. If the initiative involves customization of an existing program for delivery to an off-campus cohort group, also explain the nature of the proposed curricular customization. **With the increase of career opportunities in health care, acute and long-term care and rehabilitation facilities, graduates are needed to provide quality nutritional care. Students will learn to prepare healthy food, learn quality sanitation procedures and create menus for regular and modified diets. Students will complete 150 hours of supervised clinical experiences to meet the competency requirements of the Dietary Managers Association. Upon successful completion of the associates degree students will be eligible and prepared to take the certification exam for the CDM Certified Dietary Manager.**
4. Are there similar programs at other Michigan universities? If so, where? What is the enrollment in the other programs? No

There are no similar programs at any other Michigan universities.

5. Briefly explain any similarities of the proposed initiative (program objectives and/or curriculum) with already established FSU or KCAD programs:

The Dietary Foodservice Management degree would combine objectives and curriculum from both the Hospitality Programs in the Ferris State University College of Business and the College of Allied Health Sciences.

6. Briefly describe indicators of the employment market for students completing this initiative, including sources used for employment information/data.

According to multiple employment websites seen below, as well as the employment listings of the Dietary Managers Association, there is a great deal of demand for dietary managers. With Dietary Management Certification offered through the Dietary Managers Association, the students with dietary management schoolwork will be quite competitive when applying for these positions.

Employment Website	Total Dietary Manager Jobs	Total Certified Dietary Manager Jobs
www.simplyhired.com	85	14
www.monster.com	124	38
www.jobsearch.com	276	75
www.dmaonline.org	12	6

Also, the U.S. Department of Labor's Occupational Outlook Handbook 08-09 Edition states that dietetic and nutrition jobs will continue to grow "as fast as average," and it states that with certification and training job candidates will be competitive.

7. Briefly describe indicators of potential student interest/demand for the new initiative, including sources used for student market information/data. **Much of the demand for initiating such a degree has come for consultations with current Advisory Board members, alumni, industry professionals and College of Allied Health administrators and faculty. Individuals seeking certification in the dietary management area will be trained and qualified to administrate menus, food purchasing, and food preparation; and to apply nutrition principles, document nutrition information, ensure food safety, manage work teams and much more. The student demand will likely come from two important cohorts. Non-traditional students, who because of the down turn in employment opportunities, are seeking a degree with high employability, long term stability and short time for academic preparation (2 years). The demand for culinary expertise in healthcare is growing at a dramatic pace. Increasing numbers of executive chefs are entering the healthcare arena and seeking formal education in dietary management to synthesize talents in food preparation with an understanding of nutrition therapy, management and food safety. The second group is health care interested students that do not meet the nursing or other health care academic requirements but want to work in a health related field. These are often students that have experience through their career centers in high school with the health care field.**
8. To what extent will this initiative draw new students to FSU or KCAD? To what extent will it draw students from existing programs? **This degree has great potential to attract students that want a health area degree but do not want to work directly with patients or in healthcare administration. Rather than leaving FSU, this degree offers these students an opportunity for valuable employment in health care. Most dietary managers work in healthcare –nursing homes, rehab facilities, senior living communities, or hospitals. In healthcare settings, dietary managers often run food and nutrition departments typically working in tandem with Registered Dietitians and other members of the healthcare team. Since this will be the only program of its kind in the State of Michigan the opportunity to attract students to this unique degree, where employment opportunities are high and sustained, should be high.**
9. Approximately how many students are expected to enroll?
 _20 in the first year? ___40 after three years?
10. At which FSU campuses/regional centers or other sites will the initiative be offered? **Main Campus, Big Rapids,**
11. Will Internet or other distance learning technology be used for course/program delivery? Describe. **Not in the initial development phase. Future online classes and Grand Rapids off site, may be offered.**

Complete questions 12, 13, 14 in consultation with department head/chair and/or dean.

12. Provide a rough estimate of the resources needed to implement the initiative:

	Start-up	After Three Years
Supply and expense	\$500	\$700*
Equipment	\$	\$
Full-time faculty	\$	\$
Overload/adjunct faculty	\$20,000**	\$20,000***
Other		

* The cost of the Dietary Managers Association's annual certification maintenance fee and the 5-year program certification renewal fee.

** The cost of adjunct faculty assuming that courses are taught in the first year. If not, subtract \$3,150 for each course taught in subsequent years (Allied Health & COB).

*** The cost of adjunct faculty if there are multiple sections of the courses per year, then the cost increases by \$3,160 per section (Allied Health & COB).

Estimate of Library Resources	x Adequate	Some new resources needed	Significant number of resources needed
-------------------------------	------------	---------------------------	--

13. Project the resources that could come from reallocation within the department or college and the new resources that would be required. **Allied Health does not have the capacity right now to reallocate any staff. However, Allied Health does have adjunct faculty who are interested in developing and teaching courses. New funds would need to be made available.**

14. Are there new space needs? If so, how much? How would the space be used? Has existing space been identified? If so, where? Is renovation/remodeling necessary? **Existing Food Service Labs and classrooms within West Commons will be used. Existing classrooms in Allied Health will be used for the three new courses that will need to be created .**

Is there professional accreditation for the program? Is it required or voluntary? Will accreditation be sought, and when? What will be the one-time and ongoing costs of accreditation? **Yes. Certification is not required but is recommended and can be obtained through the Dietary Managers Association (DMA). This certification is based on core coursework which covers the areas of foodservice management, human resources management, nutrition and medical nutrition therapy, and food safety/sanitation, with a minimum of 120 hours of classroom instruction and at least 150 hours of hands-on practice (internship) in dietary management.**

At least one year of data is necessary before certification application can be completed; however, the curriculum will be set up using the DMA approved-curriculum guidelines to make the certification process run more smoothly.

The initial program review fee is \$150.00, the 5-year program renewal fee is \$100.00, and the annual maintenance fee is \$200.00. The annual maintenance fee allows the program to have a school listing on the DMA website, Dietary Manager magazine subscription, quarterly DMA newsletters and promotional brochures at no extra charge.

15. Has there been preliminary discussion with other departments/colleges that will be involved in course/program delivery? If yes, what was the feedback?

Yes. Discussions have been made with the Dean of Allied Health in the development of this new degree. At this time three classes will need to be developed and taught by Allied Health faculty. The other classes are already in existence.

Ferris State University - College of Business
 A.A.S. in Dietary and Food Service Management - 62 Credits
 Option 1 Traditional Student

FIRST YEAR

Fall Semester			Crs
RFIM	101		1
RFIM	113		3
RFIM	115		3
ENGL	150		3
CAHS	160		3
		TOTAL	13

Spring Semester			Crs
MRIS	102		1
RFIM	127		3
SC w/lab			4
CAHS	122		3
COMM	105		3
		TOTAL	14

SECOND YEAR

Fall Semester			Crs
RFIM	211		3
RFIM	214		3
ACCT	201		3
ENGL	250		3
MATH	117		3
		TOTAL	15

Spring Semester			Crs
Cultural Enrichment			3
MGMT	301		3
CAHS	222		3
HCSA	336*		4
ECON	221		3
		TOTAL	16

Summer Semester			Crs
RFIM	292		3
CAHS	261		1
		Total	4

* course number change effective Fall 2010

CURRICULUM CONSULTATION FORM

To be completed by each department affected by the proposed change, new degree, new program, new minor, or new course. Potential duplication of coursework is reason for consultation.

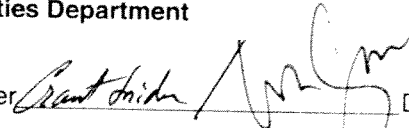
1. This completed form must be forwarded with the proposal to the chair/head of the department to be consulted.
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Failure to respond is interpreted as support for the proposal.

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

RE: Proposal Title Associates in Dietary and Food Service Management Degree

<p>Initiator(s): <u>Julie A. Doyle, Ellen Hanneline, Lianne Briggs</u></p> <p>Proposal Contact: <u>J. Doyle</u> Date Sent: <u>10/22/09</u></p> <p>Department: <u>SEHM</u> Campus Address: <u>WCO-106</u> (Please print)</p>
--

<p>Responding Department: <u>Humanities Department</u></p> <p>Chair/Head/Coordinator: <u>Grant Snider</u>  Date Returned: <u>11/13/09</u></p>
--

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 scheduling, room assignments, faculty load, and prerequisites for your department. Use additional pages, if necessary.

Existing Food Service Labs and classrooms within West Commons will be used.
Existing classrooms in allied Health will be used for the three new courses that will be created. No additional prerequisites required that haven't already been built into the proposal.
Overload/adjunct faculty requested at \$3,150 for each new course taught.
Dietary Managers Associations annual certification maintenance fee and 5-year program certification renewal fee.

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RE: Proposal Title Associates in Dietary and Food Service Management Degree

Initiator(s): Julie A. Doyle, Ellen Hanneline, Lianne Briggs

Proposal Contact: J. Doyle **Date Sent:** 10/22/09

Department: SEHM **Campus Address:** WCO-106
(Please print)

Responding Department: Management Department

Chair/Head/Coordinator: David Steenstra  Date Returned: 10-26-09

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 scheduling, room assignments, faculty load, and prerequisites for your department. Use additional pages, if necessary.

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RE: Proposal Title Associates in Dietary and Food Service Management Degree

Initiator(s): Julie A. Doyle, Ellen Hanneline, Lianne Briggs

Proposal Contact: J. Doyle **Date Sent:** 10/22/09

Department: SEHM **Campus Address:** WCO-106
(Please print)

Responding Department: Language and Literature Department

Chair/Head/Coordinator: Nathan Garrelts Date Returned: 11-10-09

Based upon department faculty review on 11-10-09 (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 scheduling, room assignments, faculty load, and prerequisites for your department. Use additional pages, if necessary.

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RE: Proposal Title Associates in Dietary and Food Service Management Degree

Initiator(s): Julie A. Doyle, Ellen Hanneline, Lianne Briggs

Proposal Contact: J. Doyle **Date Sent:** 10/27/09

Department: SEHM **Campus Address:** WCO-106
(Please print)

Responding Department: Medical Records

Chair/Head/Coordinator: Greg Zimmerman  **Date Returned:** 11/3/09

Based upon department faculty review on 11/3/09 (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 scheduling, room assignments, faculty load, and prerequisites for your department. Use additional pages, if necessary.

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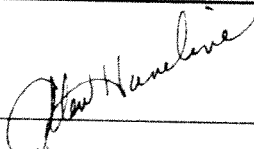
RE: Proposal Title Associates in Dietary and Food Service Management Degree

Initiator(s): Julie A. Doyle, Ellen Hanneline, Lianne Briggs

Proposal Contact: J. Doyle **Date Sent:** 10/27/09

Department: SEHM **Campus Address:** WCO-106
(Please print)

Responding Department: Allied Health

Chair/Head/Coordinator: Ellen Haneline  **Date Returned:** 10/27/09

Based upon department faculty review on 10/27/09 (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 scheduling, room assignments, faculty load, and prerequisites for your department. Use additional pages, if necessary

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RE: Proposal Title Associates in Dietary and Food Service Management Degree

Initiator(s): Julie A. Doyle, Ellen Hanneline, Lianne Briggs

Proposal Contact: J. Doyle **Date Sent:** 10/22/09

Department: SEHM **Campus Address:** WCO-106
(Please print)

Responding Department: Mathematics Department

Chair/Head/Coordinator: Kirk Weller  **Date Returned:** 10/30/09

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.

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Dietary Managers Associations annual certification maintenance fee and 5-year program certification renewal fee.

→ The "note" should say MATH ACT score of 24 or higher ~~plus~~ plus 1 year of HS algebra ~~of~~ with a C- or better

This aligns with the current MATH ACT requirement.

CURRICULUM CONSULTATION FORM

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RE: Proposal Title Associates in Dietary and Food Service Management Degree

Initiator(s): Julie A. Doyle, Ellen Hanneline, Lianne Briggs

Proposal Contact: J. Doyle **Date Sent:** 10/22/09

Department: SEHM **Campus Address:** WCO-106
(Please print)

Responding Department: AFIS Department

Chair/Head/Coordinator: James Woolen *James Woolen* **Date Returned:** 11/17/09

Based upon department faculty review on 11/17/09 (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 scheduling, room assignments, faculty load, and prerequisites for your department. Use additional pages, if necessary.

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1. Total credits in the Business Core do not meet ACBSP standards for 15 credits in the professional component of an AAS.
2. The HRM class is listed as HSCA335 on Form A but as CACA335 on the check sheet. Probably just

CURRICULUM CONSULTATION FORM

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RE: Proposal Title Associates in Dietary and Food Service Management Degree

Initiator(s): Julie A. Doyle, Ellen Hanneline, Lianne Briggs

Proposal Contact: J. Doyle **Date Sent:** 9/15/09

Department: SEHM **Campus Address:** WCO-106
(Please print)

Responding Department: SEHM 

Chair/Head/Coordinator: Matt Pinter 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 scheduling, room assignments, faculty load, and prerequisites for your department. Use additional pages, if necessary.

Existing Food Service Labs and classrooms within West Commons will be used.
 Existing classrooms in allied Health will be used for the three new courses that will be created. No additional prerequisites required that haven't already been built into the proposal.
 Overload/adjunct faculty requested at \$3,150 for each new course taught.
 Dietary Managers Associations annual certification maintenance fee and 5-year program certification renewal fee.

0320

FLITE SERVICES CONSULTATION FORM

To be completed by the liaison librarian and approved by the Dean of FLITE. All returned forms should be included in the proposal. **FLITE must respond within 20 calendar days of receipt of this form to insure that the form is included in the final proposal.**

FAILURE TO RESPOND IS CONSIDERED AS SUPPORT OF THE CHANGE.

RE: Proposal Title: Associates in Dietary and Food Service Management

Projected number of students per year affected by proposed change: 25

<p>Initiator(s): <u>Julie Doyle, Ellen Hanneline, Lianne Briggs</u></p> <p>Proposal Contact: <u>Julie Doyle</u> Date Sent: <u>11/20/09</u></p> <p>Department: <u>SEHM</u> Campus Address: <u>WCO-106</u> (Please print)</p>

<p>Liaison Librarian Signature: <u>David A Scott</u> Date: <u>11-30-09</u></p> <p>Dean of FLITE Signature: <u>Deah M. Money</u> Date Returned: <u>12-1-09</u></p>

Based upon our review on 11-30-09 (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.

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

**Ferris State University - College of Business
Associate of Applied Science
Dietary and Food Service Management - 62 Credits**

NAME: _____

ID#: _____

REQUIRED		COURSE TITLE - PREREQUISITES SHOWN IN BRACKETS ()	S.H.	GRADE
COMMUNICATION COMPETENCE - 9 Credits Required				
COMM		Select one of the following: COMM 105 or COMM 121	3	
ENGL	150	English 1 - (ENGL 074 or a min score of 14 on ACT or a min score of 370 on SAT)	3	
ENGL	250	English 2 - (ENGL 150 with a grade of C- or better)	3	
SCIENTIFIC UNDERSTANDING - 4 Credits Required				
Consult the Ferris website: www.ferris.edu/htmls/academics/gened/scicourses.html Select one course from the scientific understanding subject area - it must be a lab course.				
		Science Course w/Lab	4	
QUANTITATIVE SKILLS - 3 Credits Required				
*MATH	117	Contemporary Mathematics - (MATH110 w/ a grade of C- or better, or 19 on ACT or 460 on SAT)	3	
		Note: If MATH ACT score is 24 or higher plus 1 year of HS algebra with a C- or better - subs a gen ed elective		
CULTURAL ENRICHMENT - 3 Credits Required				
Cultural Enrichment elective, consult the General Education category of the Ferris website: www.ferris.edu/htmls/academics/gened/gened.html				
		Cultural Enrichment Elective	3	
SOCIAL AWARENESS - 3 Credits Required				
ECON	221	Prin of Macroeconomics - (MATH 110 w/ a grade of C- or better or ACT of 19 or SAT of 460)	3	
MAJOR COURSES - 34 Credits - Required				
RFIM	101	Orientation to Hospitality Industry - (None)	1	
RFIM	113	Sanitation and Safety - (None)	3	
RFIM	115	Food and Labor Cost Control System - (None)	3	
RFIM	127	Principles of Cooking & Baking (None)	3	
RFIM	211	Purchasing: Hospitality Industry (None)	3	
RFIM	214	Equipment, Layout & Design (None)	3	
RFIM	292	Restaurant and Food Industry Internship (Department approval)	3	
CAHS	160	Nutrition for Healthy Living	3	
CAHS	122	Management of Patient Dietary Needs(CAHS160)	3	
CAHS	222	Patient Services (CAHS 122)	3	
CAHS	261	Dietary Manager Certification Preparation	1	
MRIS	102	Orientation to Medical Terminology	1	
HCSA	335	Supervisory Prac HC Workers	4	
BUSINESS CORE - 6 Credits Required				
ACCT	201	Principles of Accounting 1 (MATH 110 w/ a grade of C- or better, or 19 on ACT or 460 on SAT)	3	
MGMT	301	Applied Management (None)	3	
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.				

2010 Fall

NOTE: A 2.00 GPA is required for the major and a 2.00 cumulative GPA is required for completion of the Restaurant & Food Industry Management degree.

*Will accept MATH 115/116

NEW COURSE INFORMATION FORM

See Sample – Limit to Two Pages Please

Course Identification:

Prefix: CAHS **Number:** 222 **Title:** Patient Services

Course Description:

This course will prepare students to provide nutrition education, participate in patient/client care conferences as well as understand the role of the dietary manager during regulatory agency surveys. CAHS 122 prerequisite.

Course Outcomes and Assessment Plan:

This course will prepare students to be able to:

1. **Assist patients/clients to choose foods from selective menus**
2. **Select and use nutrition education materials**
3. **Adapt teaching to client educational needs**
4. **Participate in patient/client care conferences**
5. **Participate in regulatory agency surveys**

Outcome Statement	Assessment measurement	Desired Result
Student will be able to assist patients/clients in choosing selective menus	Role Play (Students will guide a peer volunteer in the appropriate choice of foods from a selective menu in a role playing situation)	80% of the students will be able to perform the task with acceptable accuracy
Students will be able to conduct nutrition education	Appropriate nutrition education materials to meet a selected patient's educational needs	80% of the students will select appropriate nutrition education materials
	Teaching plan to meet a selected patient's educational needs	80% of the students will develop an appropriate
	Simulated patient education session	80% of the students will be able to present a simulated patient education session
Students will be able to participate in a patient/client care conference	Presentation of simulated patient case	80% of the students will be able to accurately present a patient case study to peers
Students will be able to participate in regulatory agency surveys	Case study	80% of the students will be able to accurately identify violations of standards from given case study

Course Outline including Time Allocation:

Working with patients/clients in food selection (assessment of dietary requirements for patient/client; assessment of client's knowledge and needs; selection of appropriate resources; food substitutions; patient preferences) 18 hrs

Patient education (development of plan for nutrition education, identification of educational materials and resources; use of materials in teaching patients; development of teaching plan, conduct of teaching session) 18 hrs

Patient care conference (preparation; problem identification, communication and follow-up) 3 hrs

Regulatory Agency surveys (identification of applicable standards; analysis of standards; conduct of survey to identify lack of compliance; development of plan of correction) 6 hrs

NEW COURSE INFORMATION FORM

See Sample – Limit to Two Pages Please

Course Identification:

Prefix:	Number	Title
CAHS	261	Dietary Manager Certification Preparation

Course Description:

A comprehensive review of concepts related to nutritional data, diet plans and menus, food services, nutrition education, hiring and supervision of employees, personnel development and communication, professional interaction, management of supplies, equipment use, sanitation and safety, production management and management of business operations. Test taking techniques and preparation for the national certified dietary manager exam will be addressed. Students will have an opportunity to take practice examinations. Prerequisites: All required program courses completed prior to this course. Concurrent enrollment with RFIM 292. Typically Offered Summer.

Course Outcomes and Assessment Plan:

This course will prepare students to:

- 1. Identify areas of weakness**
- 2. Develop plan for review and mastery of information identified as weaknesses**
- 3. Practice test taking skills**

Outcome Statement	Assessment measurement	Desired Result
Students will identify areas of weakness	Practice examinations	100% of the students will identify areas of weakness
Students will develop review plan	Review plan	100% of the students will develop a plan to review previously learned material
Students will enhance their test taking skills	Practice certification exam	80% of the students will score higher on the second and subsequent practice exams than on the first attempt.

Course Outline including Time Allocation:

Evaluation of knowledge 5 hours
 Development of review plan 5 hours
 Test taking skills/practice 5 hours

NEW COURSE INFORMATION FORM

See Sample – Limit to Two Pages Please

Course Identification:

Prefix: CAHS **Number:** 122 **Title:** Management of Patient Dietary Needs

Course Description:

This course will prepare students to conduct dietary screenings and to develop appropriate dietary plans to meet the needs of the patient population.

Course Outcomes and Assessment Plan:

This course will prepare students to be able to:

1. Conduct routine nutrition screening
2. Identify nutrition problems and needs
3. Create nutrition care plan
4. Modify a diet to accommodate patient nutrition needs
5. Evaluate the effectiveness of nutrition care plan

Outcome Statement	Assessment measurement	Desired Result
Student will be able to conduct a routine nutrition screening to identify problems and needs	After conducting a nutrition screening interview with volunteer subject, the student will be able to identify nutrition problems and needs	80% of the students will successfully identify nutrition problems and needs after conducting interview
Given a health record, students will be able to identify nutrition problems and needs	After review of health record, student will be able to identify nutrition problems and needs	80% of the students will be able to identify nutrition problems and needs after review of a health record.
Students will be able to create a nutrition care plan	After identification of nutrition needs, student will be able to create a nutrition care plan	80% of the students will be able to create a satisfactory nutrition care plan
Students will be able to formulate a diet to accommodate patient nutritional needs	After having been presented with patient nutritional needs, student will formulate a diet to accommodate those needs	80% of the students will be able to satisfactorily formulate a diet to meet patient needs
Students will be able to evaluate the effectiveness of a nutrition care plan	Given a case study, students will be able to evaluate the effectiveness of a nutrition care plan	80% of the students will be able to correctly evaluate the effectiveness of a nutrition care plan

Course Outline including Time Allocation:

Nutrition screening (interview of patients, clients/caregivers for diet history; gathering information from medical record; documentation of findings; routine versus at risk patients,)-9 hrs.

Identification of nutrition problems and needs (including nutritional needs of various racial, cultural and religious groups; sensitivity to patient needs; food availability) -9 hrs

Nutrition care plan- 6 hrs.

Diet plans and menus (translation of nutrition care plan into menus; modification of menus to meet specific needs; control for calories, carbohydrates, proteins, fats and minerals; compliance with physician orders) -15 hrs.

Effectiveness of diet plans and menus- 6 hrs.

CREATE NEW COURSE
Course Data Entry Form

FORM F

Create New Course
Rev. 07/23/07

I. ACTION TO BE TAKEN: CREATE A NEW COURSE

Notes

1. Complete each item in Section I and Section II.
2. If this course is to be used as a prerequisite for other university courses, Form Fs that reflect the prerequisite change must be submitted for those courses as well.

Term Effective (6 digit code only): 201008 Examples: 200801(Spring), 200805(Summer), 200808(Fall)

Note: The first four digits indicate year, the next two digits indicate month in which term begins.

II. PROPOSED FOR NEW COURSE: Complete all sections a through r. See manual for clarification.

a. Course Prefix CAHS b. Number 122 c. Enter Contact Hours per week in boxes.
LECTure LAB INDEpendent Study – Check (x)
Practicum: Seminar:

d. Course Title: Management of Patient Dietary Needs (Limit to 30 characters/spaces.)

e. College Code: CAHS f. Department Code: CAHS
Credit Hours: Check (x) type and enter maximum and minimum hours in boxes.

g. Type: Variable Fixed h. Minimum Credit Hours 3 i. Maximum Credit Hours 3

j. May Be Repeated for Added Credit: Check (x) Yes No

k. Levels: Check (x) Undergraduate Graduate Professional

l. Grade Method: Check (x) Normal Grading Credit/No Credit only (Pass/Fail)

m. Does proposed new course replace an equivalent course? Check (x) Yes No

n. Equivalent course: Prefix Number See instructions on Replacement courses.

o. CATALOG DESCRIPTION – Limit to 75 words – PLEASE BE CONCISE.

This course will prepare students to conduct dietary screenings and to develop appropriate dietary plans to meet the needs of the patient population.

p. Term(s) Offered: Spring (See instructions for listing.) q. Max. Section Enrollment: 25

r. Prerequisites/Co-requisites/Restrictions: (If none, leave blank.) Limited to 100 spaces. CAHS160.

UCC Chair Signature/Date: _____ / / _____

Academic Affairs Approval Signature/Date: _____ / / _____

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

Office of the Registrar use ONLY

Date Rec'd: _____ Date Completed: _____ Entered: SCACRSE ___ SCADETL ___ SCARRES ___ SCAPREQ ___

CREATE NEW COURSE
Course Data Entry Form

FORM F

Create New Course
Rev. 07/23/07

I. ACTION TO BE TAKEN: CREATE A NEW COURSE

Notes

1. Complete each item in Section I and Section II.
2. If this course is to be used as a prerequisite for other university courses, Form Fs that reflect the prerequisite change must be submitted for those courses as well.

Term Effective (6 digit code only): 201008 Examples: 200801(Spring), 200805(Summer), 200808(Fall)

Note: The first four digits indicate year, the next two digits indicate month in which term begins.

II. PROPOSED FOR NEW COURSE: Complete all sections a through r. See manual for clarification.

a. Course Prefix CAHS b. Number 222 c. Enter Contact Hours per week in boxes.
LECTure LAB INDEpendent Study – Check (x)
Practicum: Seminar:

d. Course Title: Patient Services (Limit to 30 characters/spaces.)

e. College Code: CAHS f. Department Code: CAHS

Credit Hours: Check (x) type and enter maximum and minimum hours in boxes.

g. Type: Variable Fixed h. Minimum Credit Hours 3 i. Maximum Credit Hours 3

j. May Be Repeated for Added Credit: Check (x) Yes No

k. Levels: Check (x) Undergraduate Graduate Professional

l. Grade Method: Check (x) Normal Grading Credit/No Credit only (Pass/Fail)

m. Does proposed new course replace an equivalent course? Check (x) Yes No

n. Equivalent course: Prefix Number See instructions on Replacement courses.

o. CATALOG DESCRIPTION – Limit to 75 words – PLEASE BE CONCISE.

This course will prepare students to provide nutrition education, participate in patient/client care conferences as well as understand the role of the dietary manager during regulatory agency surveys.

p. Term(s) Offered: Spring (See instructions for listing.) q. Max. Section Enrollment: 25

r. Prerequisites/Co-requisites/Restrictions: (If none, leave blank.) Limited to 100 spaces. CAHS122

UCC Chair Signature/Date: _____ / / _____

Academic Affairs Approval Signature/Date: _____ / / _____

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

Office of the Registrar use ONLY

Date Rec'd: _____ Date Completed: _____ Entered: SCACRSE ___ SCADETL ___ SCARRES ___ SCAPREQ ___

CREATE NEW COURSE
Course Data Entry Form

FORM F

Create New Course
Rev. 07/23/07

I. ACTION TO BE TAKEN: CREATE A NEW COURSE

Notes

1. Complete each item in Section I and Section II.
2. If this course is to be used as a prerequisite for other university courses, Form Fs that reflect the prerequisite change must be submitted for those courses as well.

Term Effective (6 digit code only): 201008 Examples: 200801(Spring), 200805(Summer), 200808(Fall)
Note: The first four digits indicate year, the next two digits indicate month in which term begins.

II. PROPOSED FOR NEW COURSE: Complete all sections a through r. See manual for clarification.

a. Course Prefix CAHS b. Number 261 c. Enter Contact Hours per week in boxes.
LECTure LAB INDEpendent Study – Check (x)
Practicum: Seminar:

d. Course Title: Dietary Manager Certification Preparation (Limit to 30 characters/spaces.)

e. College Code: CAHS f. Department Code: CAHS
Credit Hours: Check (x) type and enter maximum and minimum hours in boxes.

g. Type: Variable Fixed h. Minimum Credit Hours 1 i. Maximum Credit Hours 1

j. May Be Repeated for Added Credit: Check (x) Yes No

k. Levels: Check (x) Undergraduate Graduate Professional

l. Grade Method: Check (x) Normal Grading Credit/No Credit only (Pass/Fail)

m. Does proposed new course replace an equivalent course? Check (x) Yes No

n. Equivalent course: Prefix Number See instructions on Replacement courses.

o. CATALOG DESCRIPTION – Limit to 75 words – PLEASE BE CONCISE.

A comprehensive review of concepts related to nutritional data, diet plans and menus, food services, nutrition education, hiring and supervision of employees, personnel development and communication, professional interaction, management of supplies, equipment use, sanitation and safety, production management and management of business operations. Test taking techniques and preparation for the national certified dietary manager exam will be addressed. Students will have an opportunity to take practice examinations.

p. Term(s) Offered: Summer (See instructions for listing.) q. Max. Section Enrollment: 25

r. Prerequisites/Co-requisites/Restrictions: (If none, leave blank.) Limited to 100 spaces. All required program course completed prior to this course. Concurrent enrollment with RFIM292.

UCC Chair Signature/Date: _____ / /

Academic Affairs Approval Signature/Date: _____ / /

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

Office of the Registrar use ONLY

Date Rec'd: _____ Date Completed: _____ Entered: SCACRSE SCADETL SCARRES SCAPREQ _____

Revised 05/08/2009

PROPOSAL SUMMARY AND ROUTING FORM

Proposal Title: Create a Minor in Surveying and Mapping

Initiating Unit or Individual: Surveying Engineering

Contact Person's Name: Sayed R. Hashimi e-mail: hashimis@ferris.edu phone: 2632

Date or Term of Proposal Implementation: October 27, 2009

- Group I - A – New degree/major or major, redirection of a current offering, or elimination of a degree, major or minor
- Group I - B – New minors or concentrations
- Group II - A – Minor curriculum clean-up and course changes
- Group II - B – New Course
- Group III - Certificates
- Group IV – Off-Campus Programs

Group/Individual	Signature	Date	Vote/Action *
Program Faculty	<i>Sayed Hashimi</i>	10/15/09	<u>6</u> Support <u>0</u> Support with Concerns <u>0</u> Not Support
<i>school</i> Department Faculty	<i>Thomas Halle</i>	11/20/09	<u>4</u> Support <u>0</u> Support with Concerns <u>0</u> Not Support
Department Head / Chair	<i>Thomas Halle</i>	11/30/09	<input checked="" type="checkbox"/> Support <u>0</u> Support with Concerns <u>0</u> Not Support
College Curriculum Committee	<i>Ron McKean</i>	12/14/09	<u>11</u> Support <u>0</u> Support with Concerns <u>0</u> Not Support
Dean	<i>James E. Wolfe</i>	1/5/10	<input checked="" type="checkbox"/> Support <u>0</u> Support with Concerns <u>0</u> Not Support
University Curriculum Committee			<u>0</u> Support <u>0</u> Support with Concerns <u>0</u> Not Support
Senate			<u>0</u> Support <u>0</u> Support with Concerns <u>0</u> Not Support
Academic Affairs			<u>0</u> Support <u>0</u> Support with Concerns <u>0</u> Not Support

* Support with Concerns or Not Support must include a list of specific concerns. Votes must be shown for faculty groups. Administrators check appropriate action taken.

To be completed by Academic Affairs

President (Date Approved)

Board of Trustees (Date Approved)

President's Council (Date Approved)

1. Proposal Summary

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

The purpose of this proposal is to create a minor in Surveying and Mapping. All the courses within the minor are existing courses which means that no new courses will be created. To obtain a minor a student must complete the following core courses for a total of 12 credit hours:

SURE 110 – Fundamentals of Surveying	4 credits
SURE 115 – Intro. To Computer Mapping	1 credit
SURE 215 – Surveying Computations	3 credits
SURE 230 – Control Surveying	4 credits

In addition, the student must complete two courses (6 or 7 credits) from the following list of courses:

CENG 220 – Engineering Surveying	4 credits
SURE 340 – Photogrammetry	3 credits
SURE 365 – Legal Aspects of Surveying	3 credits
GIS 225 – Principles of Geographic Information Systems (GIS)	3 credits

Target date of implementation: The program's expected implementation date is Spring, or Fall 2010

Rationale: The targeted audiences for this program are students in the School of Built Environment, some programs in College of Arts and Sciences such as applied math, applied biology, and Criminal Justice program students in the College of Business. It could also serve as a catalyst to recruit undecided majors into surveying engineering.

While the minor will definitely help one in obtaining the Certified Surveying Technician title, it will NOT, however, make one eligible for licensure in the State of Michigan. Licensure as a professional surveyor in the State of Michigan requires a baccalaureate degree acceptable to Board of Licensing.

This proposal has been approved by the Surveying Engineering Advisory Committee.

The program does not require any additional resources in terms of faculty, facility, computers, and library material.

2. Summary of All Course Action Required*

a. Newly Created Courses to FSU:

Prefix Number Title

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
---------------	---------------	--------------

e. Removal of existing FSU courses from program

Prefix	Number	Title
---------------	---------------	--------------

3. Summary of All Consultations

Form Sent (B or C)	Date Sent	Responding Dept.	Date Received & by Whom
---------------------------	------------------	-------------------------	------------------------------------

None needed

4. Will External Accreditation be Sought? (For new programs or certificates only)

_____ **Yes** X **No**

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

5. Program Checksheets affected by this proposal.

Additional Information

The proposed minor is unique within Ferris and within the State of Michigan, however, there are several such programs in other States. The following is a list of some of the Minor programs in surveying throughout the United States:

- Purdue University, Land Surveying Minor, 31 semester hours
- The Ohio State University, Minor in Surveying and mapping, 28 semester hours
- University of Arkansas, Minor in Surveying, 18-19 semester hours
- New Mexico State University, Minor in Surveying, 20 semester hours
- Western Kentucky University, Minor in Surveying, 21 semester hours
- University of Maine, Minor in Surveying, 18 semester hours
- Louisiana State University, Minor in Surveying
- St. Cloud State University, Minor in Surveying, 24 semester hours
- Old Dominion University, Minor in Surveying

Some of the institutions listed above, offer the Minor as the only educational path to licensure as a professional surveyor in their respective States, while others offer the Minor in conjunction with the BS degree in surveying, like the one proposed here.

Because the program does not require any additional resources, gaining any number of students would be a positive development. As students realize the challenge of securing employment, particularly in Michigan, they might consider pursuing the surveying and mapping minor to broaden their potential for employment. According to the US Department of Labor Statistics (DLS), the surveying and mapping technician will receive 21% growth in employment. In short, the DLS forecast states that "... employment of surveyors, cartographers, photogrammetrists, and surveying technicians is expected to grow much faster than the average for all occupations through the year 2016".

End-of-Program Outcomes

The objective of the Minor program in surveying and mapping is to give the Program completers a general understanding of how surveying measurements are performed and to gain familiarity of knowing how to use the field surveying instruments. This knowledge gained through this Minor will enable the student who completes the Program to function as a surveying technician within an organization. The student completing this Program should be able to:

- Perform basic differential leveling in the field
- Reduce differential leveling observations
- Understand the concept of field data collection using conventional and modern electronic data collection instruments such as an electronic total station
- Understand the concept of field data collection using global positioning system (GPS) instruments
- Understand the basic concept of how to prepare a topographic map from actual survey data
- Perform traverse computations and simple traverse adjustment
- Develop an appreciation for establishing horizontal and vertical control for a small to medium size surveying project
- Have a basic understanding of State Plane Coordinates, Lambert conic projection in particular

Depending upon the student's selection of the optional courses the student should be able to have an understanding of one or more of the following:

- Perform simple circular curve calculations
- Perform the field layout of a basic circular curve
- Have an appreciation for the basic photogrammetric concepts such as photo scale, flying height, overlap, side lap
- Have an understanding of the public land surveying systems
- Have an appreciation for the basic concepts of Geographic Information Systems (GIS)

End-of-Program Assessment Plan

The assessment plan utilized for this program will include:

- Pre and post assessment in surveying coordinate geometry computations
- Standardized examinations in the courses taken by the student
- Preparation and examination of student portfolios
- Student surveys

College of Engineering Technology
Surveying Engineering

FORM D

Surveying and Mapping Minor

Proposed Check Sheet

Total credits required = 18 – 19 depending upon the options chosen

Required Core Courses

SURE 110 – Fundamentals of Surveying (MATH 120)	4 credits
SURE 115 – Intro. To Computer Mapping	1 credit
SURE 215 – Surveying Computations (SURE 110)	3 credits
SURE 230 – Control Surveying (SURE 110)	4 credits

Two courses (6 to 7 credits) from any of the following:

CENG 220 – Engineering Surveying (SURE 110)	4 credits
SURE 340 – Photogrammetry (SURE 110)	3 credits
SURE 365 – Legal Aspects of Surveying** (SURE 215, ENG 250)	3 credits
GISC 225 – Principles of Geographic Information Systems (GIS)	3 credits

**** Writing Intensive**

The courses in parentheses indicate pre-requisites

Based on comments from around campus, the General Education Task Force has produced what we hope is the final draft of the General Education Philosophy Statement given below. The statement is followed by a rationale for this latest version. This statement will be brought to the Academic Senate next week at their Tuesday, February 2, 2010 meeting.

General Education at Ferris State University challenges students to be successful citizens of a diverse and globalized world.

Rationale for current draft:

The recurring comments from around campus in response to the previous draft involved the need to include reference to “citizen” or “citizenship” and “globalized”. Rather than expand the already wordy previous draft, the task force sought to streamline the statement with words that would address these concerns and also imply many of the learning outcomes that were suggested at the early town-hall meetings.

With that in mind, it is the intent of the task force that a “...successful citizen of a diverse and globalized world” is someone who understands the important social and scientific issues of the day; someone who is able to effectively communicate their thoughts and ideas about these and other issues, and work effectively with others to address them; someone who is knowledgeable about other cultures and understands the inherent value of that; someone who is personally responsible for their own actions and behaviors; and someone who is able to develop and integrate new knowledge and experiences for a lifetime of personal and professional growth.

This should not be taken as a final or exhaustive list of what it means to be a “...successful citizen of a diverse and globalized world”, but it begins to communicate the intent of the task force. As we move forward with the general education review it's our hope that the campus community will help us frame a more articulate statement of what a “...successful citizen of a diverse and globalized world” means for us here at Ferris.

General Education Task Force

The General Education Task Force has a Group site in MyFSU for posting documents, web links, discussion topics, and announcements. This is a Public Group open to all members of the campus who have access to MyFSU. We encourage the campus community to join the Group as a way of communicating thoughts and suggestions to the task force and of staying informed about task force activities.

To join the MyFSU Gen Ed Task Force Group:

Log in to MyFSU; Click the "Groups" icon at top right; Click "Groups Index"; Click "Academic"; Click "Gen Ed Task Force"; Click "Join Group".

Once you have joined the GETF Group you will only need to click the Groups icon and the GETF Group will show up on your list of Groups.

Academic Affairs Policy

Authentication of Student Identity

Effective Immediately

Policy

Ferris State University verifies the identity of each student enrolled in and completing its courses and programs. Students' identity will first be verified upon enrollment, when official records (including transcripts) are required through the admissions process. The University re-verifies student identity through a variety of methods that are outlined in its student authentication procedures, including the requirement that students access their online courses through a secure login process. Online courses should provide sufficient interaction between students and instructors to further contribute to verifying a student's identity. The University continuously monitors the requirements associated with student authentication at the accreditor, state, and/or national levels and evaluates whether its approaches best meet its requirements.

Procedures

1. Students enrolled at Ferris are required to possess an official identification document that includes their picture. This may include a driver's license, passport, or a Ferris ID.
2. Students enrolled in online courses are required to enter their login ID and a password to access their online courses. At present, that secure access is provided through the MyFSU/FerrisConnect system. The login takes place through a secure connection.
3. Present University Information Technology policy requires that passwords must be changed frequently. Passwords must be sufficiently complex that they are not easily decoded in that, at present, they must be between 8 and 30 characters and require the inclusion of at least one upper-case letter, one lower-case letter, and one numeral.
4. Students are asked to set up a challenge question at the time they establish the password
5. Faculty, through their course syllabi or other communications, will illuminate the ways that they utilize varied methods to instruct and to assess in the online environment.
6. Online courses are, by design, available to University personnel through the course management system (FerrisConnect, currently a WebCT product), just as the face-to-face classes are visible within the university in their physical classroom presence.
7. Faculty and/or program leaders will determine the situations when a proctored examination will be required. Proctored exams are another of the many methods employed by Ferris to verify a student's identity. Frequently arrangements are made at regional sites or with community colleges to provide this testing oversight.
8. The University does not assess additional charges for verification of identity unless it makes such requirements known as fees associated with the course at the time of a student's enrollment. Such additional fees must be included on the course syllabus and must be approved by the University's Student Fees committee. Exceptions may exist if a student requires proctoring of an examination or other activity at a center that assesses a fee for this service.
9. Students' personal information is protected through the University's policies and practices related to FERPA.

10. The Coordinator of Instructional Technology, in the Faculty Center for Teaching and Learning, working collaboratively with representatives of the faculty, administration, and Information Technology staff (especially the e-learning administrator) assumes responsibility for monitoring changing requirements for institutions of higher education as well as options available for meeting the expectations of assuring students' identity.
11. Ferris online "Best Practice Guidelines" further encourage that all online courses utilize a variety of instructional and assessment strategies, including frequent instructor/student interactions, multiple measures of learning outcomes assessment, and varied approaches to assessment of learning.

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