

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

1. Call to Order
  2. Approval of Minutes
    - A. February 2, 2010
  3. Open Forum
  4. Reports
    - A. Senate President – Richard Griffin
    - B. Senate Vice President – Michael Berghoef
    - C. Senate Secretary – Sandy Alspach
    - D. Charter Revision – Carol Rewers
  5. Committee Reports
    - A. General Education Task Force – Don Flickinger
    - B. HLC Update – Robbie Teahen, Sandy Balkema, Mike Cairns
    - C. University Curriculum Committee – Leonard Johnson
- Roll Call**
6. New Business
    - A. New Degree – Energy Systems Engineering
    - B. New Degree – BS Allied Health
    - C. Degree Redirection – Reduction in Credits for M. Ed.: C & I Reading Endorsement
    - D. Degree Redirection – Business, Management Marketing & Technology Teaching Minor
    - E. Terminate Degree – Interdisciplinary Humanities Minor
    - F. Terminate Degree – Management BS
  8. Announcements
    - A. FSU President - David Eisler
    - B. Provost – Fritz Erickson
    - C. Senate President – Richard Griffin
    - D. Student Government – Claire Gould, President
  9. Open Forum
  10. Adjournment

**DRAFT  
 Ferris State University  
 Academic Senate Meeting  
 February 2, 2010  
 West Campus Community Center**

**Minutes**

I.	Action Items
A.	Without objections, the Minutes of the January meeting were approved.
B.	Without objections, the Academic Affairs Policy: Authentication of Student Identity was supported.
C.	The motion, postponed from the January meeting, to create a standing committee to maintain and review the Charter, Policies and Procedures, and any other rules the Senate may establish was passed as amended: 23 aye and 2 abstentions.
D.	Moved (Sen. Skrocki), seconded (Sen. Beistle) and passed unanimously to create a Bachelor of Science degree in Molecular Diagnostics.
E.	Moved (Sen. Alspach), seconded (Sen. Berghoef) and passed unanimously to create an Associate in Applied Science degree in Dietary and Food Service Management.
F.	Moved (Sen. Thapa), seconded (Sen. Drake) and passed unanimously to create a new minor in Surveying and Mapping.
G.	Moved (Sen. Alspach), seconded (Sen. Lashaway-Bokina) and passed with one no vote to endorse the General Education Philosophy Statement: "General Education at Ferris State University challenges students to be successful citizens of a diverse and globalized world."
H.	Without objections, the motion tabled from the January meeting to include the term "globalized" in the General Education Philosophy Statement was withdrawn.

The meeting was called to order by Pres. Griffin at 10:00 am.

Without objections, the Minutes of the January meeting were approved.

During the **Open Forum** period, Bruce Dilg encouraged Senators to participate in activities scheduled throughout the month in the Festival of the Arts. He said the program was off to great start following the 'kick-off' event last week. He reminded Senators about the Ferris tagline "Imagine More" and argued that this project reflects that sentiment. He used the images in Barnum's triptych "The Visionary" in the Arts and Sciences Commons for illustration, reminding us that all the figures are shown with eyes closed, as if they were imagining what might be. He showed the cover page of the Pioneer for February 2, remarking how the journalist was talking about the University in positive terms in the report of the Festival activities. He invited Senators to "imagine", giving examples of activities occurring during the Festival: stringed instruments and Sweet Adelines choral groups performing at basketball games. He asked Senators to be passionate about what we're doing and closed by praising the Lady Bulldog basketball team for ranking in the top nationally in academics.

Several Senators used the Open Forum period to comment.	
1.	Sen. Dakkuri expressed serious concerns about the amended Charter, especially regarding the election of the Executive Committee. He felt that the way the Executive Committee is elected, especially that the three at-large members are in the future to be selected in one ballot, could result in a strong likelihood that the EC would be dominated by one representative unit rather than having representation from the other representative units.
	Sen. Thapa echoed these concerns, observing that a majority of the Executive Committee could come from one college.
2.	Sen. Prakasam provided Senators with a flyer announcing the coming presentation by the Consul General of the Republic of Turkey, the Honorable Ugur Kenan Ipek, on Tuesday, February 9 at 11:00 am. He added that Mr. Ipek would be hosting a question/answer session in FLITE 438 from

2:00-4:00 pm that afternoon. He reported that a 30-minute media show about Turkey would be played several times on Thursday, February 4, to prepare attendees for the Consul General's remarks. (The video is also linked to the Ferris homepage.)
--

**The Report from University President** Eisler was moved to the opening hour of the meeting, in consideration of his need to travel to Lansing later in the day.

1.	Pres. Eisler summarized the State Legislature budget debate leading up to the Governor's State of the State address scheduled for Wednesday evening.
A.	Several plans are being circulated in Lansing to address budget shortfalls. He sketched elements of three plans. He felt that the Bishop Plan aiming to ask voters to vote on a Constitutional amendment regarding funding seemed remote at this time. He sensed that the Governor's address to the Lansing Rotary presaged her State of the State recommendations; including an enhanced buy-out offer to 30+ year members of MPSEERS and a reduction in benefits for future MPSEERS retirees. But he wasn't certain if this proposal applies to University employees. He expects much negotiation over the next weeks.
B.	He observed that the Executive budget due for presentation on Feb. 11 will give us more details.
1.	Sen. Sun asked if we are "public employees".
	Pres. Eisler said that question would require "a three hour answer"; it depends on the Governor's definition and focus on state education employees.
C.	On the positive side, he said that we have 300 more students than last year; retention is the key.
D.	He announced that Robert vanderOsten had asked to be replaced as chair of SPARC, and Leonard Johnson has assumed that role.
E.	He answered questions from the floor.
1.	Sen. Nash asked if the decrease in student credit hours (SCH) had been offset by the increase in students.
	Pres. Eisler felt that students taking fewer credits is good for working students, enabling them to learn more. He reviewed the change in the tuition formula that has eliminated the plateau at 15 credit hours. He argued that it is better for students to pass credits than to take so many credits. He also observed that the "churn", the practice of enrolling for more credits and then dropping a course, has been reduced.
2.	Sen. Dakkuri asked when a tuition increase would be announced.
	Pres. Eisler responded that there are still too many unknowns, but that an announcement would have to be made in time for financial aid to take tuition increases into consideration. A tuition increase range will be presented to the Board of Trustees at their May meeting; reviewed at the working session in June; and any tuition increase would be announced in July. He was concerned that announcing increases any earlier might prompt the Legislature to use that information against us. We are not going to raise tuition to cover shortfalls.

### Officer Reports

1.	President Griffin reported several additions to the agenda (noted below).
2.	Vice president Berghoef reported three items.
A.	Thank you to Sen. Sun on the Student Fees Committee for recruiting Dr. Hengli Jiao to fill the remaining seat on this important committee.
B.	A quick update from the Academic Senate Faculty Research Committee. You may have noticed in the Executive Committee minutes that we discussed the Faculty Research Committee's idea to consider adding a second call for research proposals, similar to the pattern of the Professional Development Grant schedule. After receiving only 3 research grant requests, the committee wondered if this would better accommodate faculty research opportunities. The Executive Committee encouraged the Research Committee to act as they saw fit after reviewing this idea. After deliberation, the Research Committee decided to fold

		this suggestion into its year-end report and consider the addition of a second call for research proposals in the 2010/2011 academic year.
	C.	Thanks in advance to Sen. Heaphy and Dr. Samuels for preparing this morning's presentation on TracDat. We are following up on this educational suggestion from our Fall retreat, in keeping with the idea that Academic Senators should be generally knowledgeable about major developments on campus. If you have other educational suggestions for the Senate, please forward those to any Executive Committee member.
3.		Secretary Alspach reminded Senators that additions or corrections to the Minutes should focus on substantive omissions or errors. While she is attempting to record comments made by Senators as accurately as possible, the narrative that accompanies the Minutes reporting the action of the Senate are not meant to be a complete transcription of the discussion on the floor. She asked that Senators email her any editions in the report of their comments that they feel are warranted.
	A.	She acknowledged, with gratitude, the return of administrative assistant Paula Hadley.
	B.	She acknowledged, with gratitude, the service of Robert Loesch as official Parliamentarian for the meetings.

### Committee Reports

1.	General Education Task Force (Don Flickinger)	
	A.	Assoc. VP Flickinger reported the next phase of the review process will be defining the outcomes for General Education. The procedure will include a review of earlier materials, attendance at a national General Education meeting later in February, then Townhall sessions. The aim is to do quality analysis and to present Outcomes in the fall.
2.	Higher Learning Commission (Don Flickinger, reporting for Robbie Teahen)	
	A.	Assoc. VP Flickinger presented the Academic Affairs Policy: Authentication of Student Identity. He noted the urgency of enacting this policy to comply with federal requirements.
		Pres. Griffin asked for concerns; hearing none, declared that the Senate supported posting the policy.
3.	University Curriculum Committee (Leonard Johnson)	
	A.	UCC Chair Johnson distributed a report of the action taken by the UCC in the last month.
	B.	He reminded Senators that the UCC will only have 2 more meetings before the next Senate meeting to act on proposals for fall semester.
	1.	Sen. Dakkuri asked for clarification of the notation "sent back" on the report.
		Chair Johnson explained that this notation indicated that assessment of the proposal was ongoing. The item remained on the agenda until all consultations required to get UCC approval had been concluded
4.	Election Committee (Kim Beistle)	
	A.	Election Committee Chair Beistle distributed the current list of Senators, noting that shading indicated Senators completing their first year of a two-year term. Names with shading indicated Senators whose terms expire in April.
	B.	She pointed out the attachment of the Nomination Petition and encouraged Senators to complete the Petition.
5.	TracDat Report (Maureen Heaphy and Wendy Samuels) – deferred to later in the meeting when Samuels arrived from her morning class.	

### Roll Call

Present	Abbasabadi, Alspach, Beistle, Berghoef, Brandly, Cline, Colley, Compton, Dakkuri, Drake, Griffin, Heaphy, Isler, Jewett, Jorsch, Klatt, Lashaway-Bokina, Liszewski, Lovsted, Lukusa Barnett, Luplow, McLean, Nash, Prakasam, Rewers, Sanderson, Skrocki, Smith, Speirs, Sun, Taylor, Thapa, Topcu
Absent with Cause	D. Haneline, D. Hanna, Purvis, Wagenheim
Absent	Boncher, Dekoster
Ex Officio and Guests	Eisler, Erickson, Burcham, Flickinger, Cron, Johnston, Nicol, Oldfield, J. Doyle, E. Haneline, Johnston, Heck, Johnson, Loesch, Dilg, Hashimi, Samuels

## Old Business

I.	The motion, postponed from the January meeting, to create a standing committee to maintain and review the Charter, Policies and Procedures, and any other rules the Senate may establish (“Rules Committee”) was passed as amended: 23 ayes and 2 abstentions.	
	A.	Sen. Alspach explained that the motion had been reviewed by Parliamentarian Loesch and he had recommended the inclusion of the phrase “and any other rules the Senate may establish”.
		1. Sen. Dakkuri asked for justification for the naming of the Secretary of the Senate as chair of this committee.
		2. Sen. Alspach reminded Senators that the motion had been amended at the January meeting to name the Secretary of the Senate as the chair of the committee. This procedure is also “standard operating procedure” for most bodies like the Academic Senate, according to Loesch.

## New Business

1.	Moved (Sen. Skrocki), seconded (Sen. Beistle) and passed unanimously to create a Bachelor of Science degree in Molecular Diagnostics.	
	A.	Dean Haneline justified the need for this program in the Health Care industry and explained the need for locating this program in Grand Rapids, where there was space for specialized classrooms and laboratories and access to clinical sites. She announced that Elaine Straley, author of the proposal, was leaving, but that there will be a search for her replacement.
	B.	Sen. Nash asked how comprehensive this program would be for an undergraduate program. He asked if students would be doing gene arrays, for example, and how this program would be funded, since “we can’t get it here”.
		Dean Haneline said that funding would be enhanced through donations in Grand Rapids. She explained that the “book work” would be completed in the first 2-3 years and the last year of the program would be completed in Grand Rapids, where students would learn how to run the procedures.
		Sen. Nash asked for more information; and, Dean Haneline invited him to communicate with her directly.
2.	Moved (Sen. Alspach), seconded (Sen. Berghoef) and passed unanimously to create an Associate in Applied Science degree in Dietary and Food Service Management.	
	A.	Julie Doyle explained the growing need for this kind of training as the ‘boomers’ began requiring more services. Each graduate would work with a dietician. This program is a partnership between College of Business and College of Allied Health Sciences.
3.	Moved (Sen. Thapa), seconded (Sen. Drake) and passed unanimously to create a new minor in Surveying and Mapping.	
	A.	Sayed Hashimi explained that this minor would provide opportunity for non-surveying majors to learn surveying and mapping techniques.
4.	Moved (Sen. Alspach), seconded (Sen. Lashaway-Bokina) and passed with one no vote to endorse the General Education Philosophy Statement: “General Education at Ferris State University challenges students to be successful citizens of a diverse and globalized world.”	
	A.	Fred Heck, chair of the General Education Committee, explained that the General Education Task Force had met twice since the last Senate meeting to consider the recommendations from the Academic Senate and other parties to address including the terms “citizen” and “globalized” in the statement. He referred Senators to the rationale for the new statement on their handout. The goal of the Task Force was to keep the Philosophy Statement short.
	B.	Sen. Sanderson questioned the verb “challenges”.
		Heck explained that the intent of the choice was to convey the idea that we are “not just spoonfeeding students”.

5.	Without objections, the motion tabled from the January meeting to include the term “globalized” in the General Education Philosophy Statement was withdrawn.	
	A.	Sen. Dakkuri asked for clarification of the difference between a motion to table and a motion to postpone. Parliamentarian Loesch explained that the motion to table should be used when the proposal being deliberated will be brought back up for discussion at a later time in the same meeting. Generally, the motion to postpone to a specific date is a “better idea” for handling situations like last month when the Senate ran out of time to complete discussion on the motion to endorse the General Education Philosophy Statement.
	B.	Sen. Dakkuri moved to take the motion from the table, in order to clarify the record.
	1.	Sen. Alspach reminded the Senators that the motion was to consider including the term “globalized” in the General Education Philosophy Statement. Since the Task Force had included the term in the new Statement, the motion was no longer relevant.
	2.	Sen. Prakasam, who originally made the motion, agreed to withdraw it.

### Announcements

1.	Provost Erickson explained how Academic Affairs was approaching the need for budget reductions.	
	A.	He said that he preferred selected and targeted reductions to taking reductions “across the board”. Since this procedure is more complex, he had asked the Deans to prepare proposals for a 3% reduction and an additional 5% reduction later, if needed.
		In regards to the Academic Senate, he had asked us to show what these reductions would look like. In response, the Executive Committee had targeted Supplies and Expenses for reduction, as demonstrated by moving from paper to electronic “packets” and eliminating food from the meeting.
	B.	As he said, “Long gone are easy ways to reduce the budget.” However he intends to protect instruction the most. The key is Student Credit Hour (SCH) production.
	1.	He reported that state contribution to the University budget is around 27%. The bulk of the budget comes from SCH, so protecting and growing SCH is most critical.
	2.	He focused on enrollment in two ways: recruitment and retention.
	a.	He applauded the development of new programs to recruit students, citing the action taken by the Senate today to endorse new programs.
	b.	He said, “We do a pretty good job (of retaining students)...” but he reinforced Pres. Eisler’s message that the point of recruitment is to “get kids to graduate”.
	3.	He expressed concern with the declining number of international students enrolled, measured by F1 and J1 visas issues, which are down 400 from 2001. This decline is not only a financial issue, but also has negative consequences by reducing the value that international students bring to the academic environment. He invites ideas for “re-growing” the international student population.
	C.	He answered questions from the floor.
	1.	Sen. Heaphy asked for clarification of the decline in international students.
		Provost Erickson explained that the decline had been steady over the decade, not a sharp drop following 9/11 as might have been expected.
	2.	Sen. Topcu shared that students had reported to her that the loss of the English-language program was a factor in their decision not to come to Ferris.
		The Provost agreed that English-language support is important.
	3.	Sen. Thapa clarified the differences between H1 and F1 visas: H1 visas are issued to people who want to work in the U.S.; F1 visas are issued to people who want to study here. He has heard that students are discouraged from coming to Ferris because we are located in a small town, and they are more interested in bigger cities. He reported that in his program, the number of students from Saudi Arabia has dropped from 12 to 1 in recent years.
	4.	Sen. Nash spoke to the budget. He agreed that across-the-board cuts were the most efficient but produced the most “hurt”. He thanked the Provost for the focus on increasing revenue. But he asked, “Will you consider proposals that cost initially” but promise

		increases down the road.
		The Provost said “yes”; he would be looking to support “flow back” from program growth to the whole University. He said he is looking for a more “authentic” budgeting process than the historical process that has been used here, from “my 8 month perspective, which might change in my 9 <sup>th</sup> month.”
		Sen. Nash cited the Great Lakes Scholarship program as an investment designed to increase revenue.
		The Provost agreed that this program is a good example of what he would like to see.
	5.	Sen. Prakasam asked if we would have a “plan ahead” model for budgeting for visiting faculty and adjunct faculty.
		The Provost agreed that institutions who plan now will come through the economic recovery process stronger. He said that one of the features that attracted him to come to Ferris was “our ability to adjust”.
	6.	Sen. Berghoef asked where we get retention data.
		The Provost answered that data could come from either Academic Affairs or VP Burcham. He welcomed thoughts and ideas about how this data is collected and used.
		Sen. Berghoef asked if more information could be made available about what the University is doing to recruit and retain students, perhaps posting information somewhere.
		The Provost observed that it’s easier to keep a student than to attract a new one.
	7.	Sen. Dakkuri asked if we have data on the percentage of students leaving due to low grades.
		VP Burcham responded that the biggest reason for leaving the University is the economy. Students can’t keep their grades up and work 40 hours a week, as a recent study confirms. He responded to earlier comments about the decline in international students, opining that we need to reduce costs to international students.
	8.	Sen. Nash welcomed looking at net costs to recruit and retain students.
		The Provost said that daily interaction is the key. He speculated the impact if every faculty member recruited one new student.
	D.	The Provost closed the session with the comment that he was “sadly happy to talk about the budget.”

Wendy Samuels and Maureen Heaphy demonstrated the TracDat system for captured assessment data.

1.		Heaphy described the TracDat software as a university-wide system to manage information, including outcomes results by program. The program enables assessment data to cascade from the program level to the course level. Assessment is about “how to measure if students learned what we thought we were teaching them.” This data allows us to create curriculum maps. She reported that all programs had been given a Dec. 21 deadline to file data in the system.
	A.	Sen. Alspach asked if the system captured only quantitative data. She spoke on behalf of her constituency in the Department of Humanities who were struggling with how to measure a student’s “appreciation of fine art”.
	B.	Sen. Jewett said that the UCC “verbage” drives us to develop quantitative outcomes.
		Heaphy responded that outcomes need to be measurable or observable, but that does not mean quantitative. The system allows for qualitative observations as well.
2.		Samuels described TracDat as a “container” for information. She gave an example of how she records observations of students’ demonstrating the values in her program outcomes. She explained that it is important for programs to set benchmarks to student achievement.
3.		Samuels explained that access to TracDat is granted at appropriate levels. For security purposes, some users are granted “read-only” access while others receive “read-write” access.
	A.	Heaphy extended that limited access is not a deterrent, but rather allows many people to channel data to one person who can “do” the system well.
Although many Senators left during this presentation, there were several observations noted.		
	A.	Sen. Isler asked if TracDat is available on the website.
		Both Samuels and Heaphy affirmed that TracDat is available through Academics Home.
	B.	Sen. Drake reported the challenge to accessing data when written reports gave links to documents, and reviewers were concerned about being able to navigate the system to find

		relevant data. He reported that following the links resulted in layers of paper documents, so he wondered about the efficiency of the system.
	C.	Sen. Alspach summarized her concern that the “container” will be shaping the educational process.
		Samuels encouraged us to “try to avoid that”.

The meeting adjourned at 12:00, without a final Open Forum.

---

Sandy Alspach  
Secretary

---

Richard Griffin  
President

Revised 7/23/07

## PROPOSAL SUMMARY AND ROUTING FORM

**Proposal Title:** Business, Management, Marketing, & Technology Teaching Major

**Initiating Unit or Individual:** College of Business/AFIS

**Contact Person's Name:** Jim Woolen e-mail: woolenj@ferris.edu phone: x2436

**Date or Term of Proposal Implementation:** Spring 2010

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

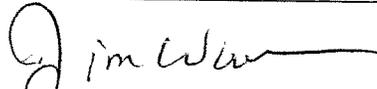
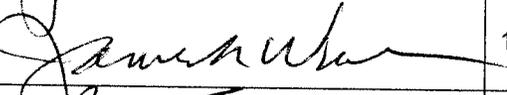
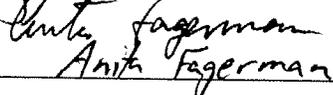
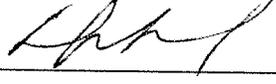
Group I - B – New minors or concentrations

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		10/20/2009	<input checked="" type="checkbox"/> Support <input type="checkbox"/> Support with Concerns <input type="checkbox"/> Not Support
Department Faculty		10/20/2009	<input checked="" type="checkbox"/> Support <input type="checkbox"/> Support with Concerns <input type="checkbox"/> Not Support
Department Head		10/21/2009	<input checked="" type="checkbox"/> Support <input type="checkbox"/> Support with Concerns <input type="checkbox"/> Not Support
College Curriculum Committee		1/10/10	<u>4</u> Support <u>2</u> Support with Concerns <u>0</u> Not Support
Dean		1/21/10	<input checked="" type="checkbox"/> Support <input type="checkbox"/> Support with Concerns <input type="checkbox"/> Not Support
University Curriculum Committee			<input type="checkbox"/> Support <input type="checkbox"/> Support with Concerns <input type="checkbox"/> Not Support
Senate			<input type="checkbox"/> Support <input type="checkbox"/> Support with Concerns <input type="checkbox"/> Not Support
Academic Affairs			<input type="checkbox"/> Support <input type="checkbox"/> Support with Concerns <input type="checkbox"/> 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

The State of Michigan revised standards and guidelines for all business education majors. All current majors/minors must be updated within the state in order to continue offering the business education major to prospective students. In response to state mandated guidelines, the former *General Business Education Major for Secondary Education* is being changed to the *Business, Management, Marketing, and Technology (BMMT) teaching* major for secondary education. While it is housed in the College of Education & Human Services, the College of Business provides all of the business and information systems courses.

As part of their general education requirements for the major, all BMMT students in the School of Education are currently required to take MATH 115, ENGL 150, ENGL 250, ENGL 325, COMM 105 or COMM 121, ECON 221, and ECON 222. The School of Education also increased the GPA requirement from 2.5 to 2.75 to help enhance performance of Ferris students when they take the state's teacher certification test (MTTC).

The following assumptions are part of the redesigned major:

- COMM 336 and MATH 122 will be moved from the major check sheet to the General Education portion of the COE check sheet.
- ISYS 105 or demonstrated competency will be required instead of requiring the course in the major.
- Required GPA will be raised to 2.75 for the major, and there will be no electives.
- The major title will be changed from "General Business Teaching Major for Secondary Education" to "Business, Management, Marketing, and Technology" major for Secondary Education to conform to state guidelines.
- ECON 221 & ECON 222 will remain in general education requirements for the program on the COE check sheet.

### New Course in the Major

A new course, **BUSN 415**, is being created to provide skills in the methodology of teaching business courses in secondary schools. This course is being created for both the BMMT and Marketing Education majors because there is an overlap between the two endorsements.

### Courses Removed from the Major

The following required courses in the major are being removed:

- **BLAW 221** is being replaced with BLAW 301.
- **COMM 336 & MATH 122** are being moved to general education requirements in the program.
- **ISYS 105** is being treated as a prerequisite in the major/degree.
- **ISYS 270** is no longer needed in the major.

The following recommended elective courses in the major are being removed:

- **ACCT 205** – no electives in the revised major.
- **ACCT 241** – no electives in the revised major.
- **ADVG 222** – no electives in the revised major.
- **ISYS 130** – no electives in the revised major.
- **ISYS 202** – replaced with ISYS 321 as required.
- **ISYS 303** – no electives in the revised major.
- **MGMT 302** – no electives in the revised major.
- **MGMT 370** – no electives in the revised major.
- **MKTG 322** – no electives in the revised major.

### Existing Courses Added to the Major

- **BLAW 301** – replaces BLAW 221.
- **BUSN 122** – added to the major.
- **FINC 201** – added to the major.
- **ISYS 321** – added to the major.

## 2. Summary of All Course Action Required\*

### a. Newly Created Courses to FSU:

Prefix	Number	Title
BUSN	415	Methods of Teaching Business Education

### 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
BLAW	301	Legal Environment of Business
BUSN	122	Introduction to Business
ECOM	200	World of E-Commerce
FINC	201	Personal Finance
ISYS	321	Business Information Systems

### e. Removal of existing FSU courses from program

Prefix	Number	Title
ACCT	205	Managerial Accounting
ACCT	241	Computerized Accounting
ADVG	222	Principles of Advertising
BLAW	221	Elementary Business Law
COMM	336	Technical & Professional Communications (moved to GE)
ISYS	105	Introduction to Microcomputer Systems & Software
ISYS	130	Internet Principles & Design
ISYS	202	Principles of Information Systems
ISYS	270	Fundamentals of Hardware & Operating Systems
ISYS	303	Systems Analysis Methods
MGMT	302	Organizational Behavior
MGMT	373	Human Resource Management
MKTG	322	Consumer Behavior

### 3. Summary of All Consultations

Form Sent (B or C)	Date Sent	Responding Dept.	Date Received & by Whom
B	10/20/2009	Marketing	10/20/09 (Kay Anderson) <i>Response</i>
B	10/20/2009	Management	10/20/2009 (Karen Ottobre) <i>- NO response</i>
B	09/15/09	School of Education	09/20/2009 (Dr. Liza Ing) <i>Response</i>
C	01/20/2010	Library	<i>Received</i>

NOTE: Form Bs (Language & Lit, Math) suggested by CCC unnecessary since no curriculum changes occurred with the general education (GE) portion of the major or degree. Moving the GE courses previously listed on the major check sheet to the degree check sheet is to satisfy state requirements and to clarify teaching major requirements to students. No GE course was added nor deleted from the degree or major.

### 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.  
Michigan Department of Education (completed)

### 5. Program Checksheets affected by this proposal.

**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** Business, Management, Marketing and Technology Teaching Major

**Initiator(s):** Jim Woolen

**Proposal Contact:** Jim Woolen **Date Sent:** 9-10-09

**Department:** College of Business  
(Please print)

**Campus Address:** BUS 212

**Responding Department:** School of Education

**Chair/Head/Coordinator:** Liza Ing

**Date Returned:** \_\_\_\_\_

Based upon department faculty review on 9/15/09 (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.

*Make EDUC 430 as a corequisite*

*Dove  
Jmw  
11/5/09*

## 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.
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.

**Failure to respond is interpreted as support for the proposal.**

**RE: Proposal Title** Business, Management, Marketing, & Technology Teaching Major

**Initiator(s):** AFIS Department & the School of Education

**Proposal Contact:** Jim Woolen

**Date Sent:** 10/20/2009

**Department:** AFIS

**Campus Address:** BUS 212

**Responding Department:** Marketing

**Chair/Head/Coordinator:** Dr. Mike Cooper

**Date Returned:** 10/20/2009

Based upon department faculty review on 10/20/2009 (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.

See attached notes

State standards for the BMMT major are explicit in their requirements. All courses were mapped to the MBE standards and the application to offer the major was approved by the state. The e-commerce inclusion is a state mandate through the standards. Reviewers asked for a course in e-business to be included.

James Woolen  
11/5/09

## 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:** Business, Management, Marketing, & Technology Teaching Major

**Projected number of students per year affected by proposed change:** 20

**Initiator(s):** Jim Woolen

**Proposal Contact:** Jim Woolen Date Sent: 01/20/2010

**Department:** AFIS **Campus Address:** BUS 212H  
(Please print)

**Liaison Librarian Signature:** \_\_\_\_\_ **Date:** \_\_\_\_\_

**Dean of FLITE Signature:** \_\_\_\_\_ **Date Returned:** \_\_\_\_\_

Based upon our review on \_\_\_\_\_ (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.**

**PROGRAM, MAJOR, OR MINOR CHECK SHEET(S)**

**FERRIS STATE UNIVERSITY  
COLLEGE OF EDUCATION AND HUMAN SERVICES  
GENERAL BUSINESS TEACHING MAJOR FOR SECONDARY EDUCATION**

**39 Semester Hours**

REQUIRED		COURSE TITLE	S.H.	GRADE
ACCT	201	Principles of Accounting 1	3	
ACCT	202	Principles of Accounting 2	3	
BLAW	221	Elementary Business Law	3	
COMM	336	Technical and Professional Communications (COMM 121)	3	
ISYS	105	Introduction to Microcomputer Systems & Software	3	
ISYS	270	Fundamentals of Hardware & Operating Systems	3	
ISYS	305	Software Systems	3	
MATH	122	Mathematical Analysis for Business	3	
MGMT	301	Applied Management	3	
MKTG	321	Principles of Marketing	3	
STQM	260	Introduction to Statistics	3	
		TOTAL	33	
<b>RECOMMENDED ELECTIVES – 6 HOURS REQUIRED</b>				
ACCT	205	Managerial Accounting	3	
ACCT	241	Computerized Accounting	3	
ADVG	222	Principles of Advertising	3	
FINC	312	Financial Markets & Institutions	3	
ISYS	130	Internet Principles & Design	3	
ISYS	202	Principles of Information Systems	3	
ISYS	303	Systems Analysis Methods	3	
MGMT	302	Organizational Behavior	3	
MGMT	373	Human Resource Management	3	
MKTG	322	Consumer Behavior	3	
<b>NOTE: A 2.50 GPA IS REQUIRED IN THE MAJOR/MINOR</b>				

FIELD EXPERIENCE REQUIREMENT: Two years of wage earning occupational work experience (within the last five (5) years) required for the General Business major. One-year experience plus one semester EDUC 391 is acceptable. EDUC 391 credit will be granted for approved occupational experience (8 credits maximum).

**Note:** Though faculty advisors are responsible for advising students regarding degrees requirements, it is the student who is ultimately responsible for choosing the correct courses and for following the correct program. 8/04 jed

**PROGRAM, MAJOR, OR MINOR CHECK SHEET(S)**

**FERRIS STATE UNIVERSITY  
COLLEGE OF EDUCATION AND HUMAN SERVICES  
BUSINESS, MANAGEMENT, MARKETING & TECHNOLOGY EDUCATION (GQ)  
TEACHING MAJOR FOR SECONDARY EDUCATION**

**36 Semester Hours**  
(All courses required – no electives)

PFX	No.	COURSE TITLE – Prerequisites shown in ( )	CR	GRADE
ACCT	201	Principles of Accounting 1 (none)	3	
ACCT	202	Principles of Accounting 2 (ACCT 201)	3	
BLAW	301	Legal Environment of Business (none)	3	
BUSN	122	Introduction to Business (none)	3	
BUSN	415	Business Education Teaching Methods (EDUC 430 as co-requisite)	3	
ECOM	200	World of E-Commerce (none)	3	
FINC	201	Personal Finance (none)	3	
ISYS	321	Business Information Systems (ACCT 202 & MKTG 321 & MGMT 301)	3	
ISYS	305	Software Systems (ISYS 105 or demonstrated competency)	3	
MGMT	301	Applied Management (none)	3	
MKTG	321	Principles of Marketing (sophomore status or higher)	3	
STQM	260	Introduction to Statistics (MATH 115 or MATH 116 or MATH 117 or 24 ACT or 560 SAT)	3	

**GPA REQUIREMENTS FOR THE MAJOR**

A 2.75 overall GPA is required for the BMMT major.

**FIELD EXPERIENCE REQUIREMENT**

Two years of wage earning occupational work experience (within the last five (5) years) are required for the General Business major. Contact the Vocational Authorization Officer in the School of Education (231-591-3188) for determination of applicable field experiences.

**STUDENT ADVISING DISCLAIMER**

Though faculty advisors are responsible for advising students regarding degree requirements, it is the student who is ultimately responsible for choosing the correct courses and for following the correct program.

**PREREQUISITES/COREQUISITES**

The following courses are prerequisites or co-requisites for entry into the BMMT major:

PREFIX	NUMBER	COMMENTS
COMM	336	Partially meets your general education requirements in communications.
MATH	122	Partially meets your general education requirements in mathematics.
ECON	221	Partially meets your general education requirements in social awareness.
ECON	222	Partially meets your general education requirements in social awareness.

## **Business, Management, Marketing & Technology Teaching Major**

### **SUGGESTED SEMESTER-BY-SEMESTER LAYOUT**

Every Education course is offered fall and spring semesters; therefore, the School of Education does not have a term-by-term plan for their majors. Also, courses in the BMMT major are offered as follows:

- Every semester (including summer):
  - ACCT 201
  - ACCT 202
  - BLAW 301
  - FINC 201
  - ISYS 321
  - MGMT 301
  - MKTG 321
  - STQM 260
- Fall and spring semesters only:
  - BUSN 122
  - ECOM 200 (will substitute ECOM 375 if not offered)
- Fall semester only:
  - BUSN 415 (co-req or preq is EDUC 430)
- Spring Semester Only:
  - ECOM 375 (substituted for ECOM 200)

## NEW COURSE INFORMATION FORM

*Limit to Two Pages Please*

### Course Identification:

Prefix:	Number	Title
BUSN	415	Business Education Teaching Methods

### Course Description:

Introduction to business and marketing teacher techniques for planning and delivering course content. Develop and deliver lesson practice plans. Explore role of student clubs, program advisory boards, work-based learning, and other relevant issues.

### Course Outcomes and Assessment Plan:

#### COURSE OUTCOMES:

1. Orientation to BMMT in Secondary Schools:
  - A. Collect, develop, and organize professional resources appropriate for a variety of business and/or marketing education courses
  - B. Develop an understanding of the six Career Pathways that are a key component of the Michigan Career Preparation System.
  - C. Demonstrate an understanding of Michigan's Business, Management, Marketing, and Technology (BMMT) Pathway and incorporate Michigan's Business, Management, and Administration program.
  - D. Demonstrate an understanding of the U.S. Department of Education's 16 Career Clusters.
  - E. Demonstrate an understanding of the 11 content areas of business education (accounting, business law, career development, communication, computation, economics/personal finance, entrepreneurship, information technology, international business, management, and marketing) from the National Business Education Association (NBEA).
  - F. Develop an understanding of a BMMT and/or marketing education teacher certification and vocational certification.
  - G. Develop an understanding of the range and types of student organizations (e.g., DECA, BPA, FBLA) and the role they play in supporting the curriculum.
2. Instructional Planning:
  - A. Develop a course syllabus in a specific business area.
  - B. Critique business education textbooks, web sites, and software packages.
3. Strategies, Aids, Media, and Resources for Effective Instruction:
  - A. Prepare lesson plans for specific business or marketing education areas.
  - B. Demonstrate/instruct lessons in specific business or marketing education areas.
  - C. Design instructional activities that reinforce the connection between business or marketing education and the real world.
4. Assessment and Continuing Professional Development:
  - A. Demonstrate professionalism through membership in business organizations.

#### PROFESSIONAL ASSOCIATION MEMBERSHIP:

BMMT Majors: BMMT Majors are required to join the Michigan Business Education Association (MBEA). The cost of an annual student membership is \$10.

Marketing Education Majors: Marketing Education majors are required to join the Michigan Marketing Educators (MME). The MME is an organization of educators and business people committed to the career development of youth and adults in the areas of marketing, management, and entrepreneurship. The cost of an annual student membership is \$3.

## **Course Outline including Time Allocation:**

- I. Instructional Planning and Delivery Techniques for Teaching (30 hours):
  - A. General Business courses in management, business communication, introduction to business, and business law (6 hours)
  - B. Marketing and Advertising courses (6 hours)
  - C. Computing, Keyboarding and other technologies (6 hours)
  - D. Accounting courses (6 hours)
  - E. Integrated Programs (6 hours)
- II. The Role of Student Professional Clubs, Memberships and Participation (3 hours)
- III. Your Classroom and Work-based Learning (3 hours)
- IV. The Role of Advisory Boards (2 hours)
- V. The Business Teacher and Professional Development (2 hours)
- VI. Teaching Resources (2 hours)
- VII. Program Funding Issues (3 hours)

**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 BUSN      b. Number 415      c. Enter Contact Hours per week in boxes.  
LECTure 3      LAB       INDEPENDent Study – Check (x)   
Practicum:       Seminar:

d. Course Title: Business Education Teaching Methods (Limit to 30 characters/spaces.)

e. College Code: COB      f. Department Code: AFIS

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.**

Introduction to business and marketing teacher techniques for planning and delivering course content. Develop and deliver lesson practice plans. Explore role of student clubs, program advisory boards, work-based learning, and other relevant issues.

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

r. Prerequisites/Co-requisites/Restrictions: (If none, leave blank.) Limited to 100 spaces. EDUC 430 as co-requisite OR as a pre-requisite.

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 \_\_

## BMMT MAJOR

STANDARD NUMBER	COURSE SUMMARY MATRIX BUSINESS 1.0 Guidelines/Standards	FERRIS COURSE(S)	CORE COURSE OR GEN ED
<i>1.1 - Accounting</i>	1.1.1 through 1.1.4	ACCT 201	CORE
	1.1.5	MGMT 301 & ACCT 201	CORE
	1.1.6	ACCT 201	CORE
<i>1.2 - Business Law</i>	1.2.1 through 1.2.5	BLAW 301	CORE
	1.2.6	FINC 201	CORE
	1.2.7	BLAW 301	CORE
	1.2.8	BUSN 122.	CORE
<i>1.3 - Career Development</i>	1.3.1	MKTG 321 & ISYS 321	CORE
	1.3.2	BUSN 122	CORE
	1.3.3 through 1.3.4	EDUC 400	CORE EDUC
<i>1.4 - Communication</i>	1.4.1	COMM 121	GEN ED
	1.4.2	COMM 336	GEN ED
	1.4.3	ISYS 105 & ISYS 305	CORE & PREREQ
	1.4.4	BUSN 122	CORE
<i>1.5 - Globalization</i>	1.5.1	MKTG 321	CORE
	1.5.2	MGMT 301, MKTG 321 & BUSN 122	CORE
	1.5.3	MKTG 321	CORE
	1.5.4	BUSN 122	CORE
<i>1.6 - Computation</i>	1.6.1 through 1.6.2	MATH 122	GEN ED
	1.6.3	MATH 115 (pre-req for MATH 122).	GEN ED
	1.6.4	MKTG 321	CORE
	1.6.5	STQM 260	CORE
	1.6.6	ACCT 201-202	CORE

STANDARD NUMBER	COURSE SUMMARY MATRIX MANAGEMENT 2.0 Guidelines/Standards	FERRIS COURSE(S)	CORE COURSE OR GEN ED
<i>2.1 - General Principles</i>	2.1.1 through 2.1.4	MGMT 301	CORE
	2.1.5	BUSN 122 & MGMT 301	CORE
	2.1.6	BUSN 122	CORE
	2.1.7	MGMT 301	CORE
<i>2.2 - Economics and Finance</i>	2.2.1	ECON 221-222	PREREQUISITES
	2.2.2 through 2.2.3	ECON 222	PREREQUISITE
	2.2.4 through 2.2.5	ECON 221	PREREQUISITE
	2.2.6 through 2.2.7	ECON 222	PREREQUISITE
	2.2.8	BLAW 301 & ECON	CORE & PREREQ
	2.2.9	MGMT 301	CORE
	2.2.10	FINC 201	CORE
	2.2.11	ECON 221-222	PREREQUISITES

STANDARD NUMBER	COURSE SUMMARY MATRIX MARKETING 3.0 Guidelines/Standards	FERRIS COURSE(S)	CORE COURSE OR GEN ED
<i>3.0 - Marketing</i>	3.1	BUSN 122 & MGMT 301	CORE
	3.2	MKTG 321 & ECOM 200	CORE
	3.3 through 3.5	MKTG 321	CORE
	3.6	ACCT 201	CORE
	3.7	MKTG 321 & MGMT 301	CORE
	3.8 through 3.11	MKTG 321	CORE
	3.12	ECOM 200	CORE

STANDARD NUMBER	COURSE SUMMARY MATRIX TECHNOLOGY 4.0 Guidelines/Standards	FERRIS COURSE(S)	CORE COURSE OR GEN ED
<i>4.0 - Technology</i>	4.1	ISYS 321 & ISYS 305	CORE
		ENGL 150, ENGL 250, ENGL 325, COMM 336	GEN ED
		MATH 115, MATH 122 & STQM 260	GEN ED
		Two required GE courses in science	GEN ED
	4.2	COMM 121 & COMM 336	GEN ED
	4.3	ISYS 305 & ECOM 200	CORE
	4.4	ISYS 105	PREREQUISITE
	4.5 through 4.6	MGMT 301	CORE
	4.7	ISYS 305	CORE
	4.8	BLAW 301, BUSN 122, ISYS 321, & ECOM 200	CORE
4.9	ISYS 321	CORE	
4.10	ISYS 321&ISYS 305	CORE	

## Content Guidelines/Standards Matrix

College/University Ferris State University

Code: GQ

Source of Guidelines/Standards: Michigan State Board of Education

Program/Subject Area: Business, Management, Marketing, & Technology

**DIRECTIONS:** List required courses on matrix and provide additional narrative to explain how standards are met. If electives are included, they should be clearly indicated. The size of the cells may be adjusted, as needed.

No	Guideline/Standard	Level of Proficiency	Narrative Explaining how Required Courses and/or Experiences Fulfill the Standards for Secondary Programs Minimum 36 Semester Hour Group Major
<b>1.0</b>	<b>BUSINESS</b>		
<b>1.1</b>	<b>Accounting - The preparation of secondary business, management, marketing, and technology teachers will enable them to:</b>		
1.1.1	demonstrate an understanding of the various steps of the accounting cycle;	C	ACCT 201 will provide students with an understanding of the various steps of the accounting cycle. Therefore, they will be able to demonstrate an understanding of the various steps of the accounting cycle.
1.1.2	determine the value of assets, liabilities, and owner's equity and when and why they are used;	C	Since one of the outcomes of ACCT 201 is learning how to determine the value of stockholder's equity, liabilities and assets, students will be able with to determine the value of assets, liabilities, and owner's equity and when/why they are used.
1.1.3	prepare, interpret, and analyze financial statements for service, merchandising, and manufacturing businesses;	C	ACCT 201 will provide students the skills to prepare, interpret, and analyze financial statements for service, merchandising, and manufacturing businesses.
1.1.4	apply appropriate accounting principles to various forms of ownership, payroll, income taxation, and managerial systems;	C	ACCT 201 will provide students the skills to apply appropriate accounting principles to various forms of ownership, payroll, income taxation, and managerial systems.
1.1.5	evaluate the performance of an organization using planning and control principles;	C	MGMT 301 provides to enable students skills to evaluate the performance of an organization using planning and control principles.
1.1.6	describe the role of accounting in ethical business practices and decision-making.	C	ACCT 201, through introduction to GAAP, will enable students to describe the role of accounting in ethical business practices and decision-making.
<b>1.2</b>	<b>Business Law - The preparation of secondary business, management, marketing, and technology teachers will enable them to:</b>		
1.2.1	analyze the relationship between ethics and the law and describe the sources of law, structure of the court system, classifications of procedural law, and classifications of substantive law;	C	BLAW 301 provides a legal foundation for students so they can analyze the relationship between ethics and the law and describe the sources of law, structure of the court system, classifications of procedural law, and classifications of substantive law.
1.2.2	analyze the relationships among contract, sales, and consumer laws;	C	BLAW 301 provides a legal foundation for students such that they can analyze the relationships among contract, sales, and consumer laws.
1.2.3	analyze the roles and importance of agency law and employment law as they relate to the conduct of business in national and international markets;	C	BLAW 301 provides a legal foundation for students such that they can analyze the roles and importance of agency law and employment law as they relate to the conduct of business in national and international markets.
1.2.4	explain the legal rules that apply to personal property and real property;	C	BLAW 301 provides a legal foundation for students such that they can explain the legal rules that apply to personal property and real property.
1.2.5	analyze the functions of commercial paper, insurance, secured transactions, and bankruptcy;	C	BLAW 301 provides a legal foundation for students such that they can analyze the functions of commercial paper, insurance, secured transactions, and bankruptcy.
1.2.6	determine appropriateness of wills and trusts in estate planning;	B	FINC 201 provides students with sufficient skills so they can determine appropriateness of will and trusts in estate planning.

No	Guideline/Standard	Level of Proficiency	Narrative Explaining how Required Courses and/or Experiences Fulfill the Standards for Secondary Programs
1.2.7	explain the legal rules that apply to environmental, resource, and energy laws;	A	<b>Minimum 36 Semester Hour Group Major</b> BLAW 301 provides a legal foundation for students such that they can explain the legal rules that apply to environmental, resource, and energy laws.
1.2.8	describe the major types of legal entities, including sole proprietorships, partnerships, and corporations.	B	BUSN 122 will build a vocabulary of business terms, offer insight into the managerial decision-making process, and students will be able to describe the major types of legal entities, including sole proprietorships, partnerships, and corporations.
<b>1.3</b>	<b>Career Development - The preparation of secondary business, management, marketing, and technology teachers will enable them to:</b>		
1.3.1	demonstrate an understanding of assessing personal strengths and weaknesses as they relate to career exploration and development;	B	MKTG 321 provides career exploration and use of technology in the global marketing field. After completing ISYS 321, students will be able to explain careers in the global information systems field.
1.3.2	identify career resources to develop an information base that includes global occupational opportunities;	B	BUSN 122 informs students about careers in business and other organizations from a global perspective.
1.3.3	develop a career pathways plan that includes the transition from school to work;	C	EDUC 400, Foundations in Career & Technical Education, is designed to help students learn to develop a career pathways plan that includes the transition from school to work for students.
1.3.4	describe the importance of life-long learning to career success.	B	Most classes stress the importance of being a life-long learner due to the ever increasing explosion of knowledge. EDUC 400 provides a focus in this area.
<b>1.4</b>	<b>Communication - The preparation of secondary business, management, marketing, and technology teachers will enable them to:</b>		
1.4.1	communicate in a clear, courteous, concise, considerate, and correct manner on personal and professional levels;	C	COMM 121 provides training and experience in preparation and delivery of short speeches with emphasis on the clear, concise, logical communication of ideas.
1.4.2	apply appropriate social communication skills in personal and professional situations including the application letter and resume in a global environment;	C	COMM 336 provides advanced techniques for clarifying and emphasizing ideas in oral presentations. Students prepare and deliver extemporaneous and manuscript speeches.
1.4.3	use appropriate technology to enhance the effectiveness of communications;	C	ISYS 105 will provide students with electronic communications skills, use of a productivity suite of applications, and Internet communications. ISYS 305 requires students to prepare a complete Request for Proposal (RFP) and present it to the class.
1.4.4	demonstrate appropriate leadership, supervisory, customer service, and ethical standards to communicate effectively with business constituents.	B	BUSN 122 provides students with an introduction to: business ethics; economics and our global economy; management and organizational structures; marketing and information technology in business; human resources and labor relations; accounting and business law and taxation; and, personal finance and securities markets.
<b>1.5</b>	<b>Globalization - The preparation of secondary business, management, marketing, and technology teachers will enable them to:</b>		
1.5.1	demonstrate an understanding of the role of international business, analyzing its impact on careers and doing business at the local, state, national, and international levels;	C	After completing MKTG 321, students will be able to demonstrate an understanding of the role of international business, analyzing its impact on careers and doing business at the local, state, national, and international levels.
1.5.2	demonstrate communication strategies necessary and appropriate for effective and profitable international business relations;	C	MGMT 301, MKTG 321 and BUSN 122 all provide students with capabilities to demonstrate communication strategies necessary and appropriate for effective and profitable international business relations.
1.5.3	apply marketing concepts to international business;	B	MKTG 321 will provide students skills to apply marketing concepts to international business including international marketing, and e-commerce.
1.5.4	relate the balance of trade concepts to the import/export process.	A	BUSN 122, through study economics and global economy, students will be able to relate the balance of trade concepts to the import/export process.
<b>1.6</b>	<b>Computation - The preparation of secondary business, management, marketing, and technology teachers will enable them to:</b>		
1.6.1	apply basic mathematical operations to solve problems with, and without, the use of a calculator;	C	MATH 122, Mathematical Analysis for Business, as part of the degree general education requirements, will meet these standards.
1.6.2	solve problems containing whole numbers, decimals, fractions, percents, ratios, and proportions;	C	MATH 122 provides a study of mathematical models of linear equations and linear inequalities. Topics to be covered include: matrices, business applications, linear programming including

No	Guideline/Standard	Level of Proficiency	Narrative Explaining how Required Courses and/or Experiences Fulfill the Standards for Secondary Programs <b>Minimum 36 Semester Hour Group Major</b>
1.6.3	use algebraic operations to solve problems;	C	both the geometrical approach and the simplex approach, maximizing and minimizing of standard and non-standard problems, duality, linear regression and correlation.
1.6.4	use common international standards of measurement in solving problems;	A	MATH 115, Intermediate Algebra, a prerequisite for MATH 122 and a general education requirement for the degree, will meet this standard. MATH 115 is a study of complex fractions, first and second degree equations and inequalities, exponents, radicals, and introduction to complex numbers, logarithms, and systems of equations.
1.6.5	interpret data using common statistical procedures; i.e., mean, mode, median, etc.;	B	MKTG 321 covers common international resolution problems: namely, a discussion of the use of tariffs and quotas is the most used resolution in the global arena. The World Trade Association is also an important ingredient in the chapter on international marketing.
1.6.6	use mathematical procedures to analyze and solve business problems for such areas as taxation, savings and investment, payroll records, cash management, financial statement, credit management, purchases, sales, inventory records, depreciation, cost recovery, and depletion.	B	STQM 260, Introduction to Statistics, will meet this standard. Topics include: practical aspects of sampling; data presentation, measures of central tendency and dispersion; basic probability theory; the normal probability distribution; the sampling distribution of sample means and sample proportions; confidence intervals and hypothesis tests for one-sample designs; simple linear regression and correlation.
<b>2.0</b>	<b>MANAGEMENT</b>		ACCT 201 focuses on financial accounting, which is economic information, provided by businesses to individuals outside of the business (investors and creditors). The objectives of the course is to: 1. provide the student with an understanding of the financial accounting concepts, practices and procedures, 2. help the student develop an understanding of how business transactions are evaluated and how to read and analyze financial statements and 3. provide the student with an understanding of the ethical issues involved in analyzing, and communicating financial information.  ACCT 202 provides a basic understanding of the application of accounting principles as related to Managerial Accounting, Manufacturing Accounting, Statement of Cash Flows, Decision Making, and Financial Statement Analysis. It includes an introduction to cash flows, job order and process costing, segment accounting, budgeting and standard costs.
<b>2.1</b>	<b>General Principles - The preparation of secondary business, management, marketing, and technology teachers will enable them to:</b>		
2.1.1	define management and demonstrate awareness of how managers plan, organize, lead, and control for greater efficiency and effectiveness;	A	MGMT 301 will provide students with skills so they can define management and demonstrate awareness of how managers plan, organize, lead, and control for greater efficiency and effectiveness.
2.1.2	illustrate, in practical terms and with specific examples, how globalization, environmentalism, technology, diversity, and calls for greater public accountability influence and impact managers;	B	MGMT 301 will provide students with skills so they can illustrate, in practical terms and with specific examples, how globalization, environmentalism, technology, diversity, and calls for greater public accountability influence and impact managers.
2.1.3	apply human resource principles, systems, and contingency approaches to actual management scenarios;	C	MGMT 301 will give students enough knowledge to apply human resource principles, systems, and contingency approaches to actual management scenarios.
2.1.4	demonstrate leadership, communication, planning, organizing, problem solving, decision making, and self management skills;	C	MGMT 301 provides skills in leadership principles, communication, planning, organizing, problem-solving, decision-making, and self-management skills to meet this standard.
2.1.5	explain social responsibility in business; select and justify a social responsibility strategy;	B	BUSN 122 provides an introduction to ethics while MGMT 301 extends knowledge so that students can explain social responsibility in business; select and justify a social responsibility strategy.
2.1.6	promote ethical business behavior in the workplace;	B	BUSN 122 provides an introduction to ethical behavior in business and the workplace.
2.1.7	explain human resource practices to legally and effectively manage a diverse workforce.	B	MGMT 301 will provide knowledge so that students can explain human resource practices to legally and effectively manage a diverse workforce.

No	Guideline/Standard	Level of Proficiency	Narrative Explaining how Required Courses and/or Experiences Fulfill the Standards for Secondary Programs Minimum 36 Semester Hour Group Major
<b>2.2 Economics and Finance - The preparation of secondary business, management, marketing, and technology teachers will enable them to:</b>			
2.2.1	identify economic opportunity costs for making decisions;	B	ECON 221 & ECON 222 will provide skills for the student to identify economic opportunity costs for making decisions.
2.2.2	identify the factors of production that affect productivity;	B	ECON 222 covers productivity and the firm's costs of production. Students will be able to identify the factors of production that affect productivity.
2.2.3	identify the monetary institutions and explain their roles in the U.S. and world economies;	A	ECON 222 introduces financial markets and institutions, including a brief review of the financial system of the United States, and international finance.
2.2.4	demonstrate how a free and competitive economy operates through monetary exchange, market pricing, and the law of supply and demand;	C	ECON 221 topics include: scope and meaning of economic principles basic to a free market economy through monetary exchange, market pricing, and the law of supply and demand.
2.2.5	identify key U.S. economic measures in terms of gross domestic product, employment, unemployment rate, inflation, and capital spending;	B	ECON 221 covers national income accounting; determination of equilibrium national income, recession, and expansion; government policy toward economic fluctuation; unemployment and inflation; and, the role of money and banking in recession and inflation.
2.2.6	describe types of competition and its role in the U.S. economy;	B	ECON 222 topics include: markets and equilibrium price formation; the theory of consumer demand, price elasticity of demand, productivity and the firm's costs of production; market structure, price and output determination; market structure, resource allocation, and economic efficiency; resource demand, supply and pricing; and, the functional distribution of income.
2.2.7	explain how allocating private and public resources affects the economy;	B	ECON 222 covers resource allocation/demand and economic efficiency. Students will explain how allocating private and public resources affects the economy.
2.2.8	describe the rights and responsibilities of citizens in the U.S. economic prosperity;	B	BLAW 301, through debtor-creditor relationships, consumer protections, labor and environmental laws, and other regulatory concepts, will provide students with the abilities to describe the rights and responsibilities of citizens in the U.S. economic prosperity. The ECON courses will also add to this knowledge.
2.2.9	use a rational decision making process as it applies to the role of citizens, workers, and consumers;	C	MGMT 301, supported by economic and financial concepts, will provide students a framework for them to use a rational decision making process as it applies to the role of citizens, workers, and consumers.
2.2.10	develop a personal finance plan including debt management;	C	FINC 201 introduces knowledge and techniques associated with major financial planning problems encountered by individuals and families such as savings and investments, insurance, taxes, budgeting and major purchases, retirement and estate planning. Students will be able to develop a personal finance plan including debt management.
2.2.11	Identify how to manage economic risks.	B	ECON 221 & ECON 222 will provide tools that will easily allow students to identify how to manage business economic risks. FINC 201 provides this on a personal level.
<b>3.0 MARKETING - The preparation of secondary business, management, marketing, and technology teachers will enable them to:</b>			
3.1	explain fundamental business, management, and entrepreneurial concepts that affect business decision making;	C	BUSN 122 & MGMT 301 will provide skills so the students will be able to explain fundamental business, management, and entrepreneurial concepts that affect business decision making.
3.2	identify the concepts, strategies, and systems needed to interact effectively with others;	B	MKTG 321, through study on global competition, E-commerce, and selling concepts will be able to identify the concepts, strategies, and systems needed to interact effectively with others. ECON 200 will enable students to: demonstrate an understanding of how marketers, IT and designers collaborate; analyze and apply methods of online marketing and selling.
3.3	demonstrate the economic principles and concepts fundamental to marketing;	B	MKTG 321 will provide skills sufficient for students to demonstrate the economic principles and concepts fundamental to marketing. The two required prerequisite economics courses will provide solid principles in economics.
3.4	demonstrate the concepts and strategies needed for career exploration, development, and growth;	C	MKTG 321 will provide skills sufficient for students to demonstrate the concepts and strategies needed for career exploration, development, and growth.

No	Guideline/Standard	Level of Proficiency	Narrative Explaining how Required Courses and/or Experiences Fulfill the Standards for Secondary Programs <b>Minimum 36 Semester Hour Group Major</b>
3.5	explain the concepts and processes needed to move, store, locate, and/or transfer ownership of goods and services;	B	MKTG 321, through study on logistics and the supply chain, will be able to explain the concepts and processes needed to move, store, locate, and/or transfer ownership of goods and services.
3.6	apply financial concepts to business decision making;	C	ACCT 201 provides knowledge about financial concepts related to business decision-making.
3.7	explain the concepts, systems, and tools needed to gather, access, synthesize, evaluate, and disseminate information for use in making business decisions;	C	MKTG 321 provides skills on market research, product strategies, promotional activities and segment/target marketing so students can explain and use concepts, systems, and tools needed to gather, access, synthesize, evaluate, and disseminate information for use in making business decisions. MGMT 301 provides skills on the organizational management/environmental management aspects.
3.8	identify the concepts and strategies utilized in determining and adjusting prices to maximize return and meet customers' perceptions of value;	B	MKTG 321 provides concepts on strategies to maximize return while balancing consumer expectations and perceptions. Students will be able to identify the concepts and strategies utilized in determining and adjusting prices to maximize return and meet customers' perceptions of value.
3.9	decipher the concepts and processes needed to obtain, develop, maintain, and improve a product or service mix in response to market opportunities;	C	MKTG 321 provides these skills through the "Marketing Plan" which students submit as a culmination of their marketing knowledge gained in the course. This includes market responses and opportunities and product/service improvement concepts.
3.10	identify the concepts and strategies needed to communicate information about products, services, images, and/or ideas to achieve a desired income;	B	MKTG 321 provides students with skills so they can identify the concepts and strategies needed to communicate information about products, services, images, and/or ideas to achieve a desired income.
3.11	identify the strategies needed to determine client needs and wants; respond through planned, personalized communication that influences purchase decisions and enhances future business opportunities;	C	MKTG 321 provides students with these skills through exposure to product promotional concepts, customer driven marketing, relationship marketing, and consumer behavior concepts. They will be able to identify the strategies needed to determine client needs and wants; respond through planned, personalized communication that influences purchase decisions and enhances future business opportunities.
3.12	use technology to implement marketing activities.	B	ECOM 200 will enable students to: demonstrate understanding of how marketers, IT and designers collaborate; analyze and apply methods of online marketing and selling; analyze web sites for effectiveness of design, color choices and navigation; evaluate various payment methods to integrate for offline/online marketing; demonstrate the importance of and application of online security methods; analyze information from online professionals including a webmaster, a purchasing agent, a web designer, and an IT expert; demonstrate an understanding of appropriate ethics for online businesses; evaluate various applications for the Internet, Intranets and Extranets.
<b>4.0</b>	<b>TECHNOLOGY - The preparation of secondary business, management, marketing, and technology teachers will enable them to:</b>		
4.1	Demonstrate achievement of information technology cluster-specific academic knowledge and skill standards. Academic Foundations in the IT Cluster include: 1. Demonstrate Language Arts Knowledge and skills required to pursue career and post-secondary education opportunities within the IT career cluster. 2. Demonstrate mathematics knowledge and skills required to pursue the full-range of career and post-secondary education opportunities within the IT career cluster. 3. Demonstrate science knowledge and skills required to pursue the full-range of career and post-secondary education opportunities within the IT career cluster.	B	1. ISYS 321 will acquaint students with an overview of the vocabulary, terms, and jobs within the IT career field. After taking ISYS 321, students will be able to explain career paths in the IT field. Various English and communications general education courses (ENGL 150, ENGL 250, ENGL 325, COMM 336) will enhance the Language Arts skills. 2. Various general education courses (MATH 115, MATH 122) and a major course (STQM 260) will provide skills for the student to be able to demonstrate mathematics knowledge and skills required to pursue the full-range of career and post-secondary education opportunities within the IT career cluster. 3. The two required general education courses in science (7-8 credits) will meet the science standard. ISYS 305 will provide additional knowledge and skills to enhance science knowledge used in the IT field.
4.2	demonstrate oral and written communication skills in	B	• COMM 121, Fundamentals of Public Speaking, as part of the degree general education

No	Guideline/Standard	Level of Proficiency	Narrative Explaining how Required Courses and/or Experiences Fulfill the Standards for Secondary Programs <b>Minimum 36 Semester Hour Group Major</b>
4.3	<p>creating, expressing, and interpreting technical information and ideas;</p> <p>formulate solutions to information technology problems using critical thinking skills (analyze, synthesize, and evaluate) independently and in teams;</p>	B	<p>requirements and a prerequisite for COMM 336, will meet part of this standard. Topics include: training and experience in preparation and delivery of short speeches with emphasis on the clear, concise, logical communication of ideas; emphasis on informative and persuasive speaking.</p> <ul style="list-style-type: none"> <li>• COMM 336, Technical &amp; Professional Presentations, will provide skills that will exceed this standard. The course will provide advanced techniques for clarifying and emphasizing ideas in oral presentations. Students also prepare and deliver extemporaneous and manuscript speeches.</li> <li>• ISYS 305 examines the use of commercial software products to meet an organization's information systems needs. It presents a methodology for analyzing information system requirements, evaluating competing software products, selecting and installing products, training users, and supporting the products. Upon successful completion of this course, the student will: (1) define the process of evaluation of business software; (2) evaluate application needs for various businesses; (3) evaluate various vendor products; (4) evaluate documentation and training for various software products; (5) develop System Manual for business needs; (6) describe the process of installing and configuring software products; (7) evaluate various versions of Operating systems and identifying various advantages and disadvantage of each; (8) evaluate various popular utility software products for the maintenance of a microcomputer system. A team project is required.</li> <li>• ECOM 200 requires small group work and individual presentations.</li> </ul>
4.4	demonstrate the use of specific information technology tools to access, manage, integrate, and create information;	B	ISYS 105 is required in the professional component of the degree, and will provide skills to meet this standard. Topics include use of common micro application software, including: windows type operating systems, word processing, spreadsheets, presentation software, and Internet search strategies.
4.5	<p>in the larger environment understand:</p> <ol style="list-style-type: none"> <li>roles within teams, work units, departments, organizations, inter-organizational systems, and</li> <li>identify how key organizational systems affect organizational performance and the quality of products and services;</li> </ol>	C	<ol style="list-style-type: none"> <li>MGMT 301 spends 15 contact hours on organizational structure including roles within teams, work units, departments, organizations and inter-organizational systems.</li> <li>MGMT 301 spends 15 contact hours on organizational structure including organizational culture and group behavior. This will give students the abilities to identify how key organizational systems affect organizational performance and the quality of products and services.</li> </ol>
4.6	<p>demonstrate knowledge of:</p> <ol style="list-style-type: none"> <li>health, safety, and environmental management systems in organizations and their importance to organizational performance and regulatory compliance, and</li> <li>personal ability to follow organizational policies and procedures and contribute to continuous improvement in performance and compliance;</li> </ol>	B	<ol style="list-style-type: none"> <li>MGMT 301 provides students with a description and analysis of business activities designed to manage an organization to efficiently serve employees, customers, and the community. BLAW 301 spends 25 contact hours on government regulation of business including environmental and regulatory compliance.</li> <li>MGMT 301 spends 15 contact hours on organizational structure including personal roles in an organization, policies and procedures for employees, and how they contribute to performance improvement and regulatory compliance.</li> </ol>
4.7	apply leadership and teamwork skills in collaborating with others to accomplish organizational goals and objectives;	C	ISYS 305 requires a team project in the course. Many other courses in the major and program also require team projects.
4.8	demonstrate an understanding of professional ethics and legal responsibilities;	C	<ul style="list-style-type: none"> <li>• BLAW 301 and BUSN 122 provide a framework to enable students to demonstrate an understanding of professional ethics and legal responsibilities.</li> <li>• ISYS 321 will provide students the ability to explain legal considerations and privacy concerns within the context of business information systems.</li> <li>• After completing ECOM 200 students will be able to demonstrate an understanding of appropriate ethics for online businesses.</li> </ul>
4.9	explain career development and planning as it is related to	C	After completing ISYS 321, students will be able to explain IT career development and different

No	Guideline/Standard	Level of Proficiency	Narrative Explaining how Required Courses and/or Experiences Fulfill the Standards for Secondary Programs Minimum 36 Semester Hour Group Major
4.10	<p>the information technology field;</p> <p>Demonstrate knowledge of design, operation, and maintenance of technology systems for information technology careers.</p>	C	<p>career paths in the field.</p> <p>After completing ISYS 321, students will be able to:</p> <ol style="list-style-type: none"> <li>1. Demonstrate an understanding of computer hardware used in business systems.</li> <li>2. Demonstrate a basic understanding of different types of software.</li> <li>3. Explain careers in information systems.</li> <li>4. Explain how businesses use teleprocessing, networks, and the Internet.</li> <li>5. Demonstrate basic business database applications.</li> <li>6. Explain how systems analysis is used to solve business problems.</li> <li>7. Explain the basic functions of manufacturing, marketing, accounting, and human resource Information Systems.</li> <li>8. Develop an Ecommerce application.</li> <li>9. Develop a disaster and recovery plan.</li> <li>10. Explain legal considerations, privacy concerns within business information systems.</li> </ol> <p>ISYS 305 examines the use of commercial software products to meet an organization's information systems needs. It presents a methodology for analyzing information system requirements, evaluating competing software products, selecting and installing products, training users, and supporting the products.</p>





**Darlene J Waring/FSU**

12/11/2009 09:09 AM

To Anita Fagerman/FSU

cc Jim Woolen/FSU

bcc

Subject Business, Management, Marketing & Technology Teaching  
Major proposal submitted for approval...

The below proposal is being submitted for CCC review and approval please.....thank you!



DCC001.PDF

Darlene Waring  
Secretary II  
Accountancy, Finance & Information Systems  
waringd@ferris.edu  
Phone: 231-591-2434  
Fax: 231-591-3521



Anita Fagerman/FSU  
01/11/2010 10:06 AM

To Darlene J Waring/FSU@FERRIS  
cc Jim Woolen/FSU@FERRIS  
bcc  
Subject CCC Proposal Results: AY2009-2010 #11 Business,  
Management, Marketing, and Technology Teaching Major

History: This message has been replied to.

Hi Darlene and Dr. Woolen,

Here's the final CCC vote on Proposal 11:

**Proposal AY2009-2010 #11 Business, Management, Marketing, and Technology Teaching Major**

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

Concerns:

1. This is a Group IIA proposal. It needs to be submitted as such. *done*
2. On Form F for BUSN415
  - a. The implementation date needs to be changed from 201001 because the October 1<sup>st</sup> deadline has passed for Spring 2010 implementation. *done*
  - b. Listing EDUC 430 as a co-requisite suggests that BUSN415 should be offered fall, winter, and spring – not just fall. *done*
3. There are items missing in the Proposal. These items can be found on page G-8 of the UCC Curriculum Planning and Procedures Manual. (Find the manual at <http://www.ferris.edu/htmls/administration/academicaffairs/vpoffice/senate/univcurrcomm/Curriculum%20Manual.pdf>)
  - a. Term by term plan for students
  - b. Need Form B from Management Department.
  - c. Need Form B from Department of Languages and Literature. *unnecessary*
  - d. Need Form B from Math Department. *unnecessary*
  - e. Need Form C - Library/Instructional Services Consultation Form *sent 1/20/10*
4. Clarify the major title in the Form A narrative. It's one thing on the top of Form A and then different in the Form A narrative (the placement of the quotation marks is inconsistent). *done*
5. The Proposal should state the original GPA requirement on Form A. (Except for the GPA change, all other changes were well-explained and clarification of the before/after GPA would be useful.) *done*

I'll plan to sign the Proposal Form tomorrow.

Anita

*ANF*

Revised 05/08/2009

PROPOSAL SUMMARY AND ROUTING FORM

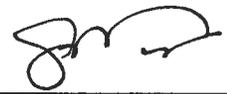
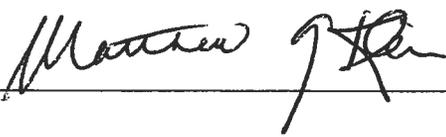
Proposal Title: Terminate Interdisciplinary Humanities Minor

Initiating Unit or Individual: Humanities Area

Contact Person's Name: Grant Snider e-mail: snider@ferris.edu phone: 2777

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 or Academic Unit Faculty		12/2/09	<input checked="" type="checkbox"/> Support <input type="checkbox"/> Support with Concerns <input type="checkbox"/> Not Support
Department Faculty		11-11-09	<input checked="" type="checkbox"/> Support <input type="checkbox"/> Support with Concerns <input type="checkbox"/> Not Support
Department Head		12-1-09	<input checked="" type="checkbox"/> Support <input type="checkbox"/> Support with Concerns <input type="checkbox"/> Not Support
College Curriculum Committee		1/26/10	<input checked="" type="checkbox"/> Support <input type="checkbox"/> Support with Concerns <input type="checkbox"/> Not Support
Dean		2-1-10	<input checked="" type="checkbox"/> Support <input type="checkbox"/> Support with Concerns <input type="checkbox"/> Not Support
University Curriculum Committee			<input type="checkbox"/> Support <input type="checkbox"/> Support with Concerns <input type="checkbox"/> Not Support
Senate			<input type="checkbox"/> Support <input type="checkbox"/> Support with Concerns <input type="checkbox"/> Not Support
Academic Affairs			<input type="checkbox"/> Support <input type="checkbox"/> Support with Concerns <input type="checkbox"/> 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.)

**In preparation for Academic Program Review, we conducted an initial study of the minor. That study revealed that of the three students ever associated officially with the minor, two of them have stopped attending the university. The third student will graduate at the end of the Spring 2010 semester. In addition to the minor essentially having no students enrolled, there are no courses dedicated exclusively to the minor. The area has concluded, therefore, that there is no value in maintaining the program, and we are seeking the termination of the minor. The Humanities Area still has six other minors, some of which are quite robust in terms of curriculum and enrollment. We would prefer to dedicate our energies to those other programs.**

**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**

<b>Form Sent (B or C)</b>	<b>Date Sent</b>	<b>Responding Dept.</b>	<b>Date Received &amp; by Whom</b>
<b>Not applicable</b>			

**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.**

**5. Program Checksheets affected by this proposal.**

**Interdisciplinary Humanities Minor**

## **PROGRAM, MAJOR, OR MINOR CHECK SHEET(S)**

Insert both the current curriculum check sheet (if applicable) followed by proposed curriculum check sheet" and/or "academic program requirements" list.

- **LABEL CHECK SHEETS AS "FORM D CURRENT" and "FORM D PROPOSED."**
- **Checksheets should indicate total credits, General Education requirements per catalog guidelines (include course levels), and the minimum number of 300 and 400 level courses.**
- **Indicate all course prerequisites.**
- **Indicate any special admissions, continuation, or graduation requirements.**

### **Why Choose the Interdisciplinary Humanities Minor?**

A minor in Interdisciplinary Humanities involves broad study of the culture of a given place and time, whether it be contemporary America, ancient Greece, or the Far East. It considers how artists, writers, and intellectuals have responded to the challenges of their own time. Students examine the historical political, economic, and social developments of a certain time or place, and then evaluate the cultural expressions (philosophy, history, religion, art, music, drama, literature, and film) in light of those conditions. Interdisciplinary Humanities expose students to many concepts, develop their skills of interpretation and critical thinking, and enable students to become cultural and social critics.

### **Admission Requirements**

This Interdisciplinary Humanities minor is open to any student admitted to Ferris State and pursuing a baccalaureate degree. The minor is designed to complement any Ferris major program.

### **Graduation Requirements**

An academic minor may only be awarded upon completion of a baccalaureate degree at Ferris State. This minor requires a minimum of 18 credits with a minimum 2.0 grade average in these courses.

Also, 50 percent of the credits for a minor must be taught by Ferris State University.

### **More Information**

Advisor: Dr. James Walker  
Phone: 231-591-2776  
e-mail: walker@ferris.edu  
Department of Humanities  
Ferris State University  
1009 Campus Dr./JOH 119  
Big Rapids, MI 49307-2280  
Phone: 231-591-3675

### **Required Courses Credit Hours**

#### **Required Courses (6 Credits)**

HUMN 101 Classical and Medieval Period 3  
HUMN 102 Renaissance to 20th Century 3

#### **Choose 3 Credits from the following:**

HUMN 202 African-Amer Cult Expression 3  
HUMN 230 Women-the Arts-and Society 3  
RELG 325 Eastern Religions 3  
FILM 360 Gender and Race in Film 3  
ARTH 203 African American Art History 3  
ARTH 325 Women and Art 3

#### **Electives (Choose 9 Credits)**

RELG 326 Western Religions 3  
HUMN 327 Mythology 3  
ARTH 312 American Art 3  
ARTH 310 History of 20th Century Art 3

Revised 05/08/2009

## PROPOSAL SUMMARY AND ROUTING FORM

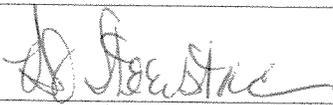
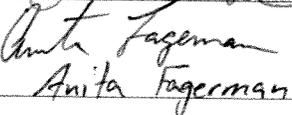
**Proposal Title: Close Management BS**

**Initiating Unit or Individual: Management Dept.**

**Contact Person's Name: Karen Ottobre e-mail: ottobrek@ferris.edu phone: 2427**

**Date or Term of Proposal Implementation: 2010 Spring or Summer**

- 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			<input type="checkbox"/> Support <input type="checkbox"/> Support with Concerns <input type="checkbox"/> Not Support
Department Faculty			<u>16</u> Support <u>4</u> Support with Concerns <u>1</u> Not Support
Department Head		2/12/10	<input checked="" type="checkbox"/> Support <input type="checkbox"/> Support with Concerns <input type="checkbox"/> Not Support
College Curriculum Committee	Anita Fagerman 		<u>7</u> Support <u>0</u> Support with Concerns <u>0</u> Not Support
Dean		2/12/10	<input checked="" type="checkbox"/> Support <input type="checkbox"/> Support with Concerns <input type="checkbox"/> Not Support
University Curriculum Committee			<input type="checkbox"/> Support <input type="checkbox"/> Support with Concerns <input type="checkbox"/> Not Support
Senate			<input type="checkbox"/> Support <input type="checkbox"/> Support with Concerns <input type="checkbox"/> Not Support
Academic Affairs			<input type="checkbox"/> Support <input type="checkbox"/> Support with Concerns <input type="checkbox"/> 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**

The Management B.S. needs to be closed. It was addressed in the last two program reviews that this program is not significantly different from Business Administration. It doesn't attract enough students and they can be taken care of with the development of a minor and certificate in management. These are both being worked on at the present time by a professor in the department. Also, students can take the few different classes from the Management degree in the Business Administration B.S. in the diversified area to achieve the same result.

**2. Summary of All Course Action Required\***

- b. **Courses to be Deleted From FSU Catalog:**  
No courses will be deleted.

**3. Summary of All Consultations**

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

**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: Management B.S. Attached – Form D.**

Below are the responses from the department head to address the faculty concerns as well as the comments from faculty who voted with concerns or abstained:

Memo

To:                      The College and University Curriculum Committees

From:                  David Steenstra  
                              Management Department Head

RE:                     Closing of the B.S. in Management Degree

Date:                   11/30/09First iteration  
                              01/27/10Second iteration

The Management Department faculty have submitted their votes to close the B.S. in Management Degree program. The original tally was 12 in favor, 4 support with concerns, and 1 opposed. Those faculty that issued concerns and opposition were asked for clarification statements which are included in this package. From an academic perspective, our department would concur that there is little if any difference between the B.S. in Management and the B.S. in Business Administration degree.

Should any student really want a degree in "Management", all of the courses originally required in the Management curriculum can be accommodated in the Business Administration curriculum.

The template provide on the following page clearly presents this evidence in a comparative model.

Given that all the clarification dialog has now been completed and that there has not been any compelling cases presented for keeping this degree open, I move that this program be closed.

David Steenstra  
 Management Department Head  
 01/27/10

**Bachelor of Science in Business**

**Business Administration / Management**

**Bus. Adm. Major**

INTB310 or 335  
ISYS105  
MGMT302  
MGMT373  
MGMT447  
MGMT488  
Directed Elective  
Directed Elective  
MGMT491 or Directed Elective  
Accounting, Finance, or Statistics Elective

**Management Major**

\* INTB335  
  
\* MGMT302  
\* MGMT373  
  
\* MGMT488  
+ COMM421  
+ ACCT205  
+ FINC323  
+ BLAW421  
+ ISYS411  
+ MGMT375  
+ MKTG466 or 472

**Other**

12 Credits of Concentration

**Other**

ISYS200  
Internship or Elective  
Elective  
Elective

**What If: Bus. Adm. Major with Management Concentration**

INTB310 or 335	Same
ISYS105	or ISYS200
MGMT302	Same
MGMT373	Same
MGMT447	
MGMT488	Same
Directed Elective	COMM421
Directed Elective	ACCT205
MGMT 491 or Directed Elective	Same
Act., Fin., or Stats. Elective	FINC323

**12 Credit Management Concentration**

BLAW421  
ISYS411  
MGMT375  
MKYG466 or 472

## Responses from faculty:

From: Mark Brandly/FSU  
To: Karen M Ottobre/FSU@FERRIS  
Date: 11/17/2009 08:17 PM  
Subject: Closing the Mgmt BS Program

I did not understand the issues fully, so that determined my vote. Mark

From: John A Kane/FSU  
To: Karen M Ottobre/FSU@FERRIS  
Date: 10/20/2009 12:54 PM  
Subject: vote on Management degree closure

I abstained from voting for the following reasons.

1. There was a 50% increase in enrollment in the Management program.
2. To close a program because of program review requirements makes no sense. If program review is such a burden, the review process should be changed.
3. With the general education and business core requirements being the same for all COB programs, they all overlap a lot. What are the differences between a Business Administration degree with a concentration in Human Resources and the HR degree? Very little.

I did not vote no because I thought it should be a decision of the faculty in the management seniority group.

From: Ashraf S Afifi/FSU  
To: Karen M Ottobre/FSU@Ferris  
Date: 11/18/2009 03:34 PM  
Subject: Re: Help Please

Hi Karen,

I abstained because I think that it might be more beneficial, for the future, to keep the program shelved instead of buried. Thank you.

Ashraf, Afifi

From: John E Vermeer/FSU  
To: Karen M Ottobre/FSU@FERRIS  
Cc: David J Steenstra/FSU@FERRIS  
Date: 11/24/2009 03:42 PM  
Subject: Re: Rational for vote of "No"

Hi Karen,

Actually, I voted "No" on the closure.

It is difficult to quickly state, but let me a bit of history and a bullet point of rational for my "No" vote.

Historically the Management program was distinctive from Business Administration in that it was a more rigorous and demanding program. In addition to a unique combination of Business classes it required

- two math classes beyond Math 115 -- Math 122 and Math 132
- a second Statistics class -- Inferential Statistics
- an additional upper level communications class -- COMM 336
- a foreign language

Unfortunately, during the years of lower student enrolment that began in the mid 1990's, a lower quality of student body resulted in lower numbers of students who were willing or even capable of meeting the increased math and language requirements.

In an attempt to stem the decreasing enrolments, the math requirements were relaxed, the foreign language requirement was eliminated and the additional stats and communication classes were dropped.

The resulting Management degree, or what was left of it, lost its distinctiveness and paralleled in many ways the Business Administration degree

The Management degree is an unused or underutilized asset.

It is an approved program.

**It could be morphed into a program that might be more marketable and certainly distinctive from current offerings** or even offerings at most other institutions

Example: "Management Leadership"

This would avoid the cost, hassle and time necessary to develop a program from scratch (Approval from President's Council avoided, etc.)

Little or no cost to maintain in its current form, or even shelve, for later use

Any real costs are self imposed (program review, etc.)

No real savings by cancelling – no classes that would be dropped

The only benefit to dropping the program is an "administrative" benefit in unloading another program which will not have to be administered with continuing program reviews etc.

Please let me know if you have any other questions or concerns.

John Vermeer

From: Spencer L Tower/FSU  
To: Karen M Ottobre/FSU@FERRIS  
Date: 11/25/2009 01:45 PM  
Subject: Fw: Management major closure and trac dat stuff for MGMT 302 and BUSN 499

Hi Karen,

I voted the way I did on closing the management program because I think its title is pretty well understood by employers--at least in comparison to titles like business administration and general business--and that once it is gone it would be very hard to reconstitute.

Spence  
Spence Tower, PhD  
Assistant Professor

From: Lisa M Eshbach/FSU  
To: Karen M Ottobre/FSU@FERRIS  
Date: 11/25/2009 12:29 PM  
Subject: Re: Management Closing Proposal

Hi Karen,

I abstained from voting because I didn't have enough information on the program differences to vote "Yes/No".

Let me know if you need more information.

Lisa Eshbach, Ph.D.  
Assistant Professor  
College of Business

## 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 Close Management BS**

<p>Initiator(s): <u>Management Department</u></p> <p>Proposal Contact: <u>David Steenstra</u> Date Sent: <u>1/22/10</u></p> <p>Department: <u>Management Department</u> Campus Address: <u>Bus 212</u> (Please print)</p>
---

<p>Responding Department: <u>Accounting, Finance, Information Systems</u></p> <p>Chair/Head/Coordinator: <u>James Woolen</u> Date Returned: <u>1/27/2010</u></p>
--

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

- 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 Close Management BS**

**Initiator(s):** Management Department

**Proposal Contact:** David Steenstra **Date Sent:** 1/22/10

**Department:** Management **Campus Address:** Bus 212  
(Please print)

**Responding Department:** Biological Sciences

**Chair/Head/Coordinator:** Karen Strasser **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.

## 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 Close Management BS**

Initiator(s): Management Department

Proposal Contact: David Steenstra Date Sent: 1/22/10

Department: Management Campus Address: Bus 212  
(Please print)

Responding Department: Communications

Chair/Head/Coordinator: Sandra Alspach 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.

## 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 Close Management BS

Initiator(s): Management Department

Proposal Contact: David Steenstra Date Sent: 01/22/10

Department: Management Campus Address: Bus 212  
(Please print)

Responding Department: Marketing

Chair/Head/Coordinator: Mike Cooper Date Returned: 02-09-10

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.

## 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 Close Management BS

Initiator(s): Management Department

Proposal Contact: David Steenstra Date Sent: 1/22/10

Department: Management Campus Address: Bus 212  
(Please print)

Responding Department: Humanties

Chair/Head/Coordinator: Grant Snider 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.

## 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 Close Management BS**

**Initiator(s):** Management Department

**Proposal Contact:** David Steenstra **Date Sent:** 01/22/10

**Department:** Management **Campus Address:** Bus 212  
(Please print)

**Responding Department:** Language and Literature

**Chair/Head/Coordinator:** Nathan Garrelts **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.

## 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 Close Management BS**

**Initiator(s):** Management Department

**Proposal Contact:** David Steenstra **Date Sent:** 01/22/10

**Department:** Management **Campus Address:** Bus 212  
(Please print)

**Responding Department:** Math

**Chair/Head/Coordinator:** Kirk Weller **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.

## 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 Close Management BS**

Initiator(s): Management Department

Proposal Contact: David Steenstra Date Sent: 01/22/10

Department: Management Campus Address: Bus 212  
(Please print)

Responding Department: Marketing

Chair/Head/Coordinator: Mike Cooper 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.

**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 Close Management BS**

**Initiator(s):** Management Department

**Proposal Contact:** David Steenstra **Date Sent:** 01/22/10

**Department:** Management **Campus Address:** Bus 212  
(Please print)

**Responding Department:** Social Sciences

**Chair/Head/Coordinator:** Joseph Karafa **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.

**Ferris State University-College of Business**  
**Bachelor of Science Degree in Business**  
**MANAGEMENT – 121-122 Credits**

Name: \_\_\_\_\_

ID #: \_\_\_\_\_

<b>REQUIRED</b>		<b>COURSE TITLE-PREREQUISITES SHOWN IN BRACKETS ( )</b>	<b>S.H</b>	<b>GRAD E</b>	<b>GR PTS</b>
<b>COMMUNICATION COMPETENCE - 15 Credits Required</b>					
ADDITIONAL COMMUNICATION CLASS LISTED WITH RELATED COURSE REQUIREMENTS.					
COMM	121	Fundamentals of Public Speaking (None)	3		
ENGL	150	English I (ENGL 074 w/ a grade of C- or better or a minimum score of 14 on ACT or a minimum score of 370 on SAT)	3		
ENGL	250	English II (ENGL 150 w/ a grade of C- or better)	3		
ENGL	325	Advanced Business Writing (ENGL 250 or 211 both w/ C or better)	3		
<b>SCIENTIFIC UNDERSTANDING – 7/8 Credits</b>					
Consult the Ferris website: <a href="http://www.ferris.edu/htmls/academics/gened/scicourses.html">www.ferris.edu/htmls/academics/gened/scicourses.html</a>					
Select two courses from the scientific understanding subject area (one must be a lab course).					
		Scientific Understanding with Lab	4		
		Scientific Understanding	3/4		
<b>QUANTITATIVE SKILLS – 3 Credits Required</b>					
MATH	115	Intermediate Algebra (MATH 110 w/a grade of C- or better, or 19 on ACT or 460 on SAT) If MATH ACT is 24 or higher, substitute a general education elective.	3		
<b>CULTURAL ENRICHMENT- 9 Credits Required *</b>					
Cultural Enrichment elective, consult the General Education category of the Ferris website: <a href="http://www.ferris.edu/htmls/academics/gened/cultcourses.html">www.ferris.edu/htmls/academics/gened/cultcourses.html</a>					
		Cultural Enrichment Elective	3		
		Cultural Enrichment Elective	3		
		Cultural Enrichment Elective (200 Level or above)	3		
<b>SOCIAL AWARENESS – 9 Credits Required *</b>					
<a href="http://www.ferris.edu/htmls/academics/gened/soccourses.html">www.ferris.edu/htmls/academics/gened/soccourses.html</a>					
ECON	221	Principles of Macroeconomics (MATH 110 with a grade of C- or better or ACT of 19 or SAT of 460)	3		
ECON	222	Principles of Microeconomics (ECON 221)	3		
PSYC	150	Introduction to Psychology (Reading score of 17 ACT of Verbal 430 SAT or READ 106 w/ grade of C/better)	3		
<b>COLLEGE OF BUSINESS ADDITIONAL GENERAL EDUCATION ELECTIVES – 6 Credits Required*</b>					
Consult the Ferris website: <a href="http://www.ferris.edu/htmls/academics/gened/gened.html">www.ferris.edu/htmls/academics/gened/gened.html</a> for approved courses.					
COMM	221	Small Group Decision Making (None)	3		
		General Education Elective	3		
<b>NOTICE REGARDING WITHDRAWAL, RE-ADMISSION AND INTERRUPTION OF STUDIES</b>					
Students who return to the university after 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.					

\*Global Consciousness and Race/Ethnicity or Gender must be met either through Cultural Enrichment, Social Awareness or General Education courses.

**Advising Notes:**

FSUS 100 requirement satisfied by \_\_\_\_\_  
 Global Consciousness requirement satisfied by \_\_\_\_\_  
 Race, Ethnicity, Gender requirement satisfied by \_\_\_\_\_

Ferris State University  
**Management Major**

REQUIRED		COURSE TITLE-PREREQUISITES SHOWN IN BRACKETS ( )	S.H.	GRADE	GR.PTS
<b>MANAGEMENT MAJOR – 33 Credits Required</b>					
ACCT	205	Managerial Accounting (ACCT 202)	3		
INTB	335	Cross-Cultural Business (None)	3		
COMM	421	Leadership in Small Group Communication (COMM 105 or COMM 121, and COMM 221)	3		
FINC	323	FINC 323 Financial Management 2 (FINC 322)	3		
BLAW	421	Employment Law (Junior status or instructor approval)	3		
ISYS	411	Project Management (Senior status)	3		
MGMT	302	Team Dynamics & Organizational Behavior (Sophomore Standing)	3		
MGMT	373	Human Resource Management (Sophomore Standing)	3		
MGMT	375	Negotiations (Junior Standing)	3		
MGMT	488	Adv Mgmt-Cases & Problems (FINC 322, MGMT 370 & MKTG 321)	3		
MKTG		Choose one: MKTG 466 Purchasing (MKTG 321 or Instructor approval) <b>or</b> MKTG 472 Supply Chain Management (MKTG 321)	3		
<b>ADDITIONAL – 12 Credits Required</b>					
ISYS	200	Database Design & Implementation (ISYS 105 or Demonstrated Competency in ISYS 105)	3		
		Internship Strongly Recommended – See advisor for assistance.	3		
		Elective – See advisor for assistance.	3		
		Elective – See advisor for assistance.	3		
<b>BUSINESS CORE–30 Credits Required</b>					
ACCT	201	Principles of Accounting 1 (MATH 110 with a grade of C- or better, or 19 on ACT or 460 on SAT)	3		
ACCT	202	Principles of Accounting 2 (ACCT 201 with a grade of C- or better)	3		
BLAW	321	Contracts and Sales (None)	3		
FINC	322	Financial Management 1 (MATH 115 or ACT of 24 or SAT of 560 & ACCT 202)	3		
ISYS	321	Business Information Systems (ACCT 202 & MKTG 321 & MGMT 301)	3		
MGMT	301	Applied Management (None)	3		
MGMT	370	Quality/Operations Management (Sophomore Standing)	3		
BUSN	499	Interdisciplinary Integrating Experience (FINC 322, MGMT370, MKTG 321)	3		
MKTG	321	Principles of Marketing (Sophomore status or higher)	3		
STQM	260	Introduction to Statistics (MATH 115 or MATH 116 or MATH 117 or 24 on ACT or 560 on SAT)	3		

**NOTE: A 2.00 cumulative GPA is required for the major, business core and a 2.00 cumulative GPA is required for completion of the MANAGEMENT degree.**

**PROPOSAL SUMMARY AND ROUTING FORM**

Proposal Title: Bachelor of Science in Allied Health

Initiating Unit or Individual: College of Allied Health Sciences  
 Contact Person's Name: Ellen Haneline e-mail: haneline@ferris.edu phone: x2269  
 Date or Term of Proposal Implementation: Fall, 2010

- X  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			<input type="checkbox"/> Support <input type="checkbox"/> Support with Concerns <input type="checkbox"/> Not Support
Department Faculty			<input type="checkbox"/> Support <input type="checkbox"/> Support with Concerns <input type="checkbox"/> Not Support
Department Head			<input type="checkbox"/> Support <input type="checkbox"/> Support with Concerns <input type="checkbox"/> Not Support
College Curriculum Committee	<i>Barbara Boss</i>		<input type="checkbox"/> Support <input type="checkbox"/> Support with Concerns <input type="checkbox"/> Not Support
College Faculty	<i>Ellen Haneline</i>	<i>2/8/10</i>	<input checked="" type="checkbox"/> Support <input type="checkbox"/> Support with Concerns <input type="checkbox"/> Not Support
Dean	<i>Ellen Haneline</i>	<i>2/8/10</i>	<input checked="" type="checkbox"/> Support <input type="checkbox"/> Support with Concerns <input type="checkbox"/> Not Support
University Curriculum Committee			<input type="checkbox"/> Support <input type="checkbox"/> Support with Concerns <input type="checkbox"/> Not Support
Senate			<input type="checkbox"/> Support <input type="checkbox"/> Support with Concerns <input type="checkbox"/> Not Support
Academic Affairs			<input type="checkbox"/> Support <input type="checkbox"/> Support with Concerns <input type="checkbox"/> 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 Bachelor of Science in Allied Health is being proposed as a completion degree for graduates of associate degrees in the various allied health disciplines where there is no discipline specific bachelors degree available. The curriculum is designed as a "+2" degree allowing students to transfer 60 credits of professional coursework into the degree. In addition to the professional coursework, students will be required to complete the general education requirements for a bachelor of science degree at the university, and a minimum of 31 credits of additional upper level coursework from Ferris State University. The program will be offered off-campus and on-line to accommodate the needs of adult learners in sites other than Big Rapids. There is a growing demand for a bachelor's completion program as evidenced by the 4-5 calls per week (requesting a program) that are being received by the off campus offices.*

**2. Summary of All Course Action Required\***

**a. Newly Created Courses to FSU:**

Prefix	Number	Title
CAHS	499	Capstone Project
CAHS	471	Special Topics in Health Care

**b. Courses to be Deleted From FSU Catalog:**

Prefix	Number	Title
None		

**c. Existing Course(s) to be Modified:**

Prefix	Number	Title
None		

**d. Addition of existing FSU courses to program**

Prefix	Number	Title
COMM	105	Interpersonal Communication
COMM	121	Fundamentals of Public Speaking
COMM	221	Small Group Decision Making
ENGL	150	English 1
ENGL	250	English 2
ENGL	321	Advanced Composition
MATH	115	Intermediate Algebra
CCHS	315	Epidemiology and Statistics
CAHS	351	Gerontology for the Health Care Provider
CAHS	352	Health and Physical Aspects of Aging
CAHS	353	Health Care for Older Adults
CAHS	354	Contemporary Policies, Issues and Trends in Aging
PHIL	320	Biomedical Ethics
SOCY	340	Minority Groups in America
ACCT	201	Accounting 1
HCSA	202	Health Care Law 1
HCSA	210	Health Care Finance 1
CAHS	300	Health Care Information Systems
HCSA	310	Health Care Finance 2
HCSA	336	Health Care Supervisory Practices

HCSA	225	International Health Care
HCSA	326	Health Care Personnel Practices
HCSA	460	Principles of Long Term Care
CAHS	317	Public Health
HCSA	410	Health Care Finance 3
HCSA	402	Health Care Law 2

e. Removal of existing FSU courses from program

Prefix	Number	Title
None		

3. Summary of All Consultations

Form Sent (B or C)	Date Sent	Responding Dept.	Date Received & from Whom
B	10/07/09	Humanities	10/07/09-Grant Snider
B	10/07/09	Lang and Literature	10/26/09-Nate Garrelts
B	10/7/09	Mathematics	10/16/09-Kirk Weller
B	10/7/09	Cl. Lab, Resp Care & Health Admin.	
B	10/7/09	Nursing	10/7/09-Greg Zimmerman
B	10/7/09	Social Sciences	10/6/09-Julie Coon
B	10/7/09	Accountancy, Finance And Information Systems	no response as of 11/18/09
C	10/7/09	FLITE	10/21/09-Jim Woolen 10/12/09-Allison Konieczny

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

\_\_\_\_\_ Yes                      \_\_\_\_\_x\_\_\_\_\_ No (none available)

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

5. Program Checksheets affected by this proposal.

None

Outcomes Statement and Assessment Plan:

The bachelor's of science in allied health will prepare students to:

1. apply previously learned knowledge to the completion of a project within their specialization
2. identify trends in health care

Assessment Plan:

Goal/objective	Evaluation method	Evaluation period	Responsible party
95% of the students will demonstrate the ability to apply previously learned knowledge	Project	At the completion of CAHS 499	Course instructor
95% of the students will be able to identify future trends in health care	Paper	At the conclusion of CAHS 471	Course instructor

**Ferris State University**  
Preliminary Curriculum Approval Form

**Form PCAF**

**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):	<b>Bachelor of Science in Allied Health</b>
Department(s)/College(s):	<b>College of Allied Health Sciences</b>

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

- Name of degree, major, concentration, certificate, or minor. Briefly describe the curriculum plan/template. *The Bachelor of Science in Allied Health is being proposed as a completion degree for graduates of associate degrees in the various allied health disciplines where there is no discipline specific bachelors degree available. The curriculum is designed as a "+2" degree allowing students to transfer 60 credits of professional coursework into the degree. In addition to the professional coursework, students will be required to complete the general education requirements for a bachelor of science degree at the university, the College of Allied Health Science core courses and a minimum of 15 credits of additional upper level coursework from Ferris State University.*
- Target date for implementation. Fall 2010
- 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. *This curriculum is being designed to meet the needs of students who are practicing allied health professionals and who require a bachelors degree to progress in their careers. The program will be offered off-campus and on-line to accommodate the needs of adult learners in sites other than Big Rapids. There is a growing demand for a bachelor's completion program as evidenced by the 4-5 calls per week that are being received by the off-campus sites.*
- Are there similar programs at other Michigan universities? If so, where? What is the enrollment in the other programs? *The following Michigan universities offer similar programs: Grand Valley State University: a BS program that prepares students for entry into other allied health professions such as physical therapy, physician assistant and occupational therap. Students are required to have a major in one of the various health care programs offered by the university and is not similar to the program at Ferris that requires the student to have completed the field education prior to entry. Oakland University has a +2 program identical to that proposed by this proposal. It has been designed specifically for graduates*

of the 2-year allied health programs at Macomb Community College. The third Michigan university to offer a related degree is the University of Detroit Mercy whose program is designed to meet the needs of practicing professionals.

5. Briefly explain any similarities of the proposed initiative (program objectives and/or curriculum) with already established FSU or KCAD programs: *Although the proposed program will utilize courses already in place in the Health Care Systems Administration its intent is not similar to that program. The Health Care Systems Administration program is designed to prepare individuals for practice in a wide variety of health care settings while the proposed program's intent is to prepare individuals with a broader understanding of the health care system and the ability to integrate service in selected areas of health care.*
6. Briefly describe indicators of the employment market for students completing this initiative, including sources used for employment information/data. *According to the Bureau of Labor statistics, individuals who possess both a professional certification in one of the allied health professions and a bachelor's degree face higher job prospects than do those with the associate degree alone. Additionally, graduate surveys received from graduates of the various associate degree programs within the college indicate that a bachelor's degree is needed if they are to become supervisors or managers within their clinical departments.*
7. Briefly describe indicators of potential student interest/demand for the new initiative, including sources used for student market information/data. *Throughout the past 9 months, the various offices of the College of Professional and Technological Studies have received 4-5 calls weekly requesting information about this degree. There has been no attempt to market this concept to students currently enrolled in the associate degrees within the college.*
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 will draw students to FSU in the off campus sites, however, it is not anticipated that it will draw students to either the Big Rapids campus or the campus of Kendall. It is not expected to draw students from existing programs.*
9. Approximately how many students are expected to enroll?  
    \_\_30           in the first year?                      \_\_100           after three years?
10. At which FSU campuses/regional centers or other sites will the initiative be offered? *Grand Rapids, Lansing, Delta College, Dowagiac, Traverse City, Flint*
11. Will Internet or other distance learning technology be used for course/program delivery? Describe. *The College of Allied Health Sciences Core courses and the professional level requirements will be offered on-line as will many of the general education courses. These courses are already designed for on-line delivery.*

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	\$1500	\$1500
Equipment	\$0	\$0
Full-time faculty	\$0	\$0
Overload/adjunct faculty	\$6300	12,600
Other	0	0

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. *Supply and expense budget will be supplied by the College of Professional and Technological Studies; support for on-line instruction from the provost's office; student support will be supplied by the Colleges of Allied Health Sciences and Professional and Technological Studies.*

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? *No new space is required. Because this is an on-line program, there is no space required for instruction. Student support personnel are housed within the colleges and will require no new space.*

15. 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? *There is no professional accreditation for the program.*

16. Has there been preliminary discussion with other departments/colleges that will be involved in course/program delivery? If yes, what was the feedback? *There has been discussion with the dean of the College of Professional and Technological Studies and the regional director for Southeastern Michigan. Both are highly supportive of the proposal.*

Department Head/Chair's signature: Ellen J. Haneline  
 Date 9/2/09

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

Comments:

Dean's or KCAD President's signature: \_\_\_\_\_ Date \_\_\_\_\_

- 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: \_\_\_\_\_ Date 8-11-09  
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

## Table of Contents

Proposal Summary	
Summary of Course action	2
Program outcomes and assessment plan	2
PCAF	3
General information	5
Frogs B	10
Responses to concerns raised	11
Form D	17
Term by term plan	19
Form E- CCHS 471	20
Form F-CCHS 471	20
Form E-CCHS 499	21
Form F-CCHS 499	22
Special emphasis within degree	23
Expected implementation date	24
Accreditation-	24
Licensure/Certification	24
Need for proposed degree/program	24
Offerings by neighboring institutions	
Relationship to current university programs	24
Demand for program	24
Expected number of majors	24
Resources needed	25
Faculty	
Facilities	25
Library Resources-Form C	26
Equipment	26
Budget Implications	28
End of program outcomes and assessment plan	28
Program Marketing and Recruitment	28

**Proposed degree/program: Bachelor of Science in Allied Health Science**

**Program description. General information:**

*The Bachelor of Science in Allied Health is being proposed as a completion degree for graduates of associate degrees in the various allied health disciplines where there is no discipline specific bachelors degree available. Graduates of the program will be able to pursue positions that require a bachelor's degree as the entry level. In addition, they will be prepared to enter graduate programs to pursue alternative career paths such as education.*

To be admitted to the program, students must have a previously earned associate degree in a health specialty from an accredited college or university or be enrolled within an associate degree program within the College of Allied Health Sciences, and a cumulative gpa of 2.5. Students who wish to continue in the program will be required to maintain a cumulative gpa of 2.5 and earn a minimum of a "C" grade in each of the courses completed at Ferris State University.

There will be no waiting lists for the program, two additional courses are being proposed for the new curriculum. They will be taught as demand warrants. There are no required uniforms, tools, protective devices, or required travel to learning sites. Students will learn to use no specialized equipment.

The curriculum includes courses completed during the associate degree, completion of all required general education courses specified by the university, the College of Allied Health Sciences upper level core requirements and 14 credits of allied health electives. The curriculum has been designed to allow students to pursue different avenues during their degree completion: a certificate in gerontology; a broad general exposure to health care management; specialization in health care finance; or a specialization in personnel practices in health care.



## COLLEGE OF ALLIED HEALTH SCIENCES

February 5, 2010

TO: Members of the University Curriculum Committee

FROM: Ellen Haneline, Dean 

RE: Bachelor of Science in Allied Health degree

With this memo, I am providing response to the concerns expressed about the proposed bachelor of science in Allied Health degree. The concerns come primarily from faculty members in the Health Care Systems/Health Information programs. I will respond to the individual concerns separately. However, before responding to the concerns I would like to address the false statements made in the memo from Cindy Konrad, Marcy Parry and Marie Sichelsteel.

In the Konrad/Parry/Sichelsteel memo it states that the idea for this degree was presented to the Health Care Systems Administration (HCSA) faculty during the summer, 2009. In fact, I asked the faculty to review their curriculum with an eye to making it more transfer friendly. As stated, they did that and concluded that it was not feasible. Therefore, I proceeded with the development of the currently proposed degree. They also state that there was insufficient time to discuss the degree before a vote was taken. The curriculum was placed before the faculty at their meeting on Tuesday, January 26, and discussed for approximately 20 minutes. At that time, Ms. Konrad made a motion to table the discussion until a future meeting. After discussion, the motion to table failed. There was a motion made to vote on the proposal, a second and the motion to approve the proposed curriculum carried with a vote of 21 (72%) support, 4 (13%) support with concerns and 5 (17%) not support. There were no abstentions. With a majority of the faculty in support, the proposal is being submitted to the Undergraduate Curriculum Council for consideration. I would add that at the college curriculum committee level, there was unanimous support for the proposal.

To address expressed concerns:

1. The degree is not designed to provide entry into a specific degree. RESPONSE: That is absolutely true. This degree was designed to provide opportunity for individuals, especially graduates of community college allied health programs, to earn a bachelor's degree with a health care emphasis. There has been high demand among our community college partners for us to develop such a degree.
2. The written admission requirements for this degree are found on page 10 "to be admitted to the program, students must have previously earned an associate degree in a health specialty from an accredited college or university or be enrolled within an associate degree program within the College of Allied Health Sciences, a cumulative gpa of 2.5". I am unable to see the objection when the criteria are

clearly stated. It is true that nothing prevents students from taking the majority of the courses that lead to the degree, but that is also true of the HCSA degree or many others within the university.

3. The concern about advising is also one that I cannot understand. Students enrolled off campus will be assigned to one of the two off-campus advisors for academic advising. Students enrolled on campus will be advised by the advising assistant in the college.

4. The degree will be housed in the Dental Hygiene and Medical Imaging department. The department head will assign responsibility for course development and teaching to faculty within either the department or seek volunteers from among the faculty in the college. Because this degree is, as is noted in the memo from the faculty, broad and generic there is no one group of faculty who alone possess the knowledge to teach the two courses that need to be developed for the degree.

5. This argument has no merit...the degree does meet the needs of the students by offering a degree program option that meets their need for a bachelor's degree. I take exception to the statement that the degree will not hold students to a standard of excellence. This is particularly interesting since the coursework with the exception of the capstone and the current trends course are already in existence and offered through the programs offered by the college.

6. The proposed degree offers students another option for degree completion. It may be in competition with the HCSA degree, however, it should be noted that efforts to introduce the HCSA degree to students at Delta College, Lansing Community College, MidMichigan Community College, Northwestern Community College, and Macomb Community College have not been successful because the students are not willing to complete the 60 additional credits needed for the HCSA degree in addition to the credits earned during the completion of their associates degree. The curriculum for the HCSA degree is not friendly to transfer students. The proposed degree provides an opportunity for the university to meet the needs of prospective students and is in line with the philosophy of the university.

7. While it is true that the proposed degree does contain the option for students to elect to complete several of the courses required in the HCSA degree, there is no way to control or predict which of the options for elective courses the student may complete. The degree that is granted will not be the HCSA degree and should not confuse any employer who elects to have the employee submit a completed transcript.

8. The HCSA degree should be commended for the strength of its offering and the internship requirement. The proposed degree will, in no way, lessen the value of the internship required by the HCSA program.

Re: Allied Health Sciences, Bachelors Degree (AHS, BS)

I voted yes with concerns for the AHS BS degree because I am concerned about what value it has for my students. If imaging science (Radiography, Sonography, Nuclear Medicine) students would like to go on to a Masters Degree program they will be served best by earning a degree in science because masters degree programs in imaging sciences are geared towards research or advanced practitioner positions. If an imaging student is looking to earn a BS degree to be promoted within the healthcare system I believe the current Health Care Systems Administration (HCSA) program is a better preparation for those positions. I am concerned that even with good advising, students will chose this degree because it is an easier route rather than looking at what the degree will add to their preparation for the workplace. Although it is true some employers will promote a healthcare worker with any Bachelor Degree I feel the College of Allied Health should give our students the very best preparation possible and I'm not sure what this degree will prepare my students for. This degree may be of value for other Allied Health students that I am less knowledgeable about.

Michele Weemaes, MS RDMS RVT

FSU DMS, Program Coordinator



Ellen J Haneline/FSU  
01/29/2010 01:13 PM

To Marilyn Skrocki/FSU@FERRIS  
cc  
bcc  
Subject Re: BS Allied Health - if voted- "Support w/concerns" - we need your comments

'Let me see if I can answer your questions in the text below

Ellen Haneline, Ph.D.  
Dean College of Allied Health Sciences  
Ferris State University  
Big Rapids, MI 49307  
231.591.2269  
Marilyn Skrocki/FSU

Marilyn Skrocki/FSU  
01/29/2010 01:02 PM

To Kathy M Hotz/FSU@Ferris  
cc Ellen J Haneline/FSU@FERRIS  
Subject Re: BS Allied Health - if voted- "Support w/concerns" - we need your comments

Ellen,  
Although I see a genuine need for a Bachelor of Science in Allied Health for those off-campus working adults that are already employed, who may get a raise by earning a generic bachelor degree, I am concerned that this new degree will be considered an 'easy out' with a program change for those on-campus Health Care Systems Administration students who do not want to partake in a rigorous internship program. If I understand the proposal correctly, a student could apply for the College of Allied Health Sciences Associates of Applied Sciences after completing 60 credits toward their bachelor's in HCSA, with a program change, to the generic bachelor degree and finish up their program on-line (without an internship). This statement is not clear to me. If the student is currently a dual degree student, already enrolled in one of the current associate degree programs that is correct. If the student is enrolled in the CAHS AAS, they could also apply to the BS in CAHS, but I don't really understand why a student would make a switch after completing 60 hours in the HCSA program to avoid the internship because they have completed the majority of the courses and it would not be to their benefit to go into the generic BS degree. If that occurs, what is the job market for those students who are not currently employed in a clinical area? Frankly, there is none. This program, as I said, was not designed to give people a specific job path (this is very difficult for many people because we have been so focused on "jobs"), it is designed to either give individuals a BS degree as a stepping stone to a MS degree or it is designed to give opportunity for those who are currently enrolled to gain another step on the pay scale in their institution. We have numerous individuals who simply say that they have been told that they need a bachelors degree to stay employed and not that they needed a specific BS degree. This is an attempt to meet the market demand and stay viable.

One additional concern I see, is because there are so many HCSA courses in the program (9), employers may assume students completed the HCSA degree (Ferris' 2+2

program) when they didn't. Their degree will not be in HCSA, if they are looking at the number of courses that an individual completed, it is also probable that they will be looking at the degree earned. If employers are not as impressed with graduates of the generic program, it may diminish the good reputation of the HCSA program throughout the state. This is true but not something that we can control. While gathering information for a prior APRC submission, one of the areas (supported by research opinions from employers and graduates) that positively differentiates our HCSA program from other colleges in Michigan is our internship requirement. This is a very strong component of the HCSA degree but again the BS CAHS is not the HCSA degree and is not intended to substitute for it.

Therefore, I remain, Supportive of the program, with concerns.

Marilyn Skrocki JD, MBA  
Ferris State University  
Assistant Professor  
Health Care Systems Administration

Kathy M Hotz/FSU



Kathy M Hotz/FSU  
01/27/2010 03:51 PM

To  
cc

Subject BS Allied Health - if voted- "Support w/concerns" - we need your comments

If you voted "Support with concerns" on the BS in Allied Health at yesterday's College Meeting, please submit your concerns to me or Ellen no later than Tuesday, Feb 1. We need to include those in the proposal when it goes forward.

Thanks

Kathy Hotz  
Administrative Secretary to the Dean  
College of Allied Health Sciences  
Ferris State University  
200 Ferris Drive  
Big Rapids, MI 49307  
231.591.2342  
231.591.3788 (fax)

To: University Curriculum Committee

From: Cindy Konrad, Marcy Parry, Marie Sickelsteel

Date: February 3, 2010

Subject: Bachelor of Science in Allied Health Degree

The following is a list of concerns of the faculty that did not support (voted no) the proposal for the Bachelor of Science in Allied Health on January 26, 2010.

A brief history of this degree and the faculty meeting:

1. The idea for this degree was presented to the Health Care Systems Administration (HCSA) faculty in summer of 2009. After a subcommittee researched the idea it was brought back to the full HCSA faculty and deemed not suitable as a quality degree from Ferris State University.
2. On Friday January 22, 2010 an email was sent to all CAHS faculty with the agenda for the faculty meeting for January 26, 2010 including an attachment for the new degree. This was the first we had heard of its existence.
3. At the faculty meeting there was insufficient time permitted for discussion of the degree before a vote was taken.

Concerns about this degree:

1. This degree appears to offer monetary value to the university rather than to provide educational value to the student. It is not designed to provide entrée' for an entry-level position yet students may perceive that it does have that value.
2. The written admission requirements for this degree do not match the limited discussion comments in the faculty meeting. **This degree is touted as a degree for in-place health care workers with an associates' degree in health care** (which could have educational value) yet the admission requirements do not state that. Nothing prevents students pursuing an associate's degree in health care from taking the majority of courses that lead to this bachelor degree.
3. Students could take all but 11 hours of this bachelor degree without acceptance into the degree. Without acceptance into the degree, students would not have a designated advisor, thus students would be self-advising for a significant portion of the degree.
  - This is not good education. Any potential value that could be gained by coordinated course selection is lost.
4. An advocate does not exist for this degree. There appears to be no plan for designated faculty to teach, advise or develop the new courses for this degree.

5. This degree lowers the College of Allied Health Sciences standards to meet the needs of the students rather than holding onto the standards of excellence required of all our graduates.
6. This degree has the potential to be in direct competition with the current HCSA degree given the stated admission requirements.
7. This degree could be confusing to employers as our current HCSA degree has gained a positive reputation in the health care field. The new degree contains many HCSA courses, thus, employers may not understand this and believe the person has the more rigorous degree. This would damage the straight HCSA degrees reputation.
8. FSU HCSA interns/students are frequently compared to interns/students from other universities, including graduate students. The FSU HCSA interns/students receive a higher ranking than the students from the other universities, thus, concluding that FSU HCSA interns/students are well prepared for healthcare jobs and they are an asset to any health care organization.

We acknowledge that many working employees in the health care field are recognizing a need to earn a bachelor degree to supplement their associate degree. The evolving nature of our field requires higher-level degrees to retain employment or to secure promotions. We believe that Ferris can offer a degree to serve this workplace market, while not competing with existing degrees, if it is properly developed and marketed. The following recommendations would support proper development and marketing.

Recommendations:

1. Modify the admission requirements to clearly identify the intended market, i.e., in-place health care workers with a health care associate degree and appropriate licensure and/or registration.
2. Identify a plan for designated tenure or tenure-track faculty to advise, teach and develop the new courses.

Therese E Harper/FSU  
02/02/2010 04:53 PM

To Kathy M Hotz/FSU@Ferris  
cc  
bcc  
Subject Re: BS Allied Health - if you voted against - please send  
comments

No Vote Explanation:

1. Uncertainty with the target group for this degree and appropriateness of degree- Is it for those seeking a Master degree or is it for those requiring a bachelor degree at their place of employment? These are different groups requiring different preparation. Those seeking a Master degree would be better prepared with the HCSA degree, not the BS degree.
2. The BS degree offers a bachelor degree with a large number of HCSA courses as electives, yet without the internship component, and with fewer credits necessary. While advising will help students identify which degree is best for them, students may perceive the BS program as the fast track for an HCSA degree. Likewise, there may be confusion by employers about the value of this degree.
3. There is not a clearly articulated home for this degree in the College.

Therese Harper BSN, CRRN, MSCTE  
Health Care Systems Administration Faculty  
HCSA Program Coordinator  
Ferris State University  
VFS 428  
200 Ferris Drive  
Big Rapids, MI 49307  
PH: 231-591-2279  
Email: harpert@ferris.edu

## 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** Bachelors in Allied Health

Initiator(s): Ellen Haneline

Proposal Contact: Grant Snider Date Sent: 10/6/09

Department: Humanities Campus Address: \_\_\_\_\_  
(Please print)

Responding Department: Humanities

Chair/Head/Coordinator: \_\_\_\_\_ Date Returned: \_\_\_\_\_

Based upon department faculty review on 10/7/09(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.

PHIL 320 is offered every semester and often online, so barring any huge increase in demand, we should be OK.

### 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. The response will be in writing and be included in the proposal following the consultation form.

RE: Proposal Title Bachelor's in Allied Health

Initiator(s): <u>Ellen Handline</u>
Proposal Contact: <u>Julie Coon</u> Date Sent: <u>10/6/09</u>
Department: <u>Nursing</u> Campus Address: <u>VFS 400A</u> (Please print)

Responding Department: <u>School of Nursing</u>
Chair/Head/Coordinator: <u>Julie A. Coon</u> Date Returned: <u>October 16, 2009</u>

Based upon department faculty review on Oct. 16, 2009 (date), we

- Support the above proposal. 10-0
- Support the above proposal with the modifications and concerns listed below.
- Do not support the proposal for the reasons listed below.

Comment regarding the impact this proposal has on 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 chairhead 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. The response will be in writing and be included in the proposal following the consultation form.

RE: Proposal Title Bachelor's in Allied Health

Initiator(s): <u>Ellen Hanellne</u>
Proposal Contact: <u>Julie Coon</u> Date Sent: <u>10/6/09</u>
Department: <u>Nursing</u> Campus Address: <u>VFS 400A</u> (Please print)

Responding Department: <u>School of Nursing</u>
Chair/Head/Coordinator: <u>Julie A. Coon</u> Date Returned: <u>October 16, 2009</u>

Based upon department faculty review on Oct. 16, 2009 (date), we

- Support the above proposal. 10-0
- Support the above proposal with the modifications and concerns listed below.
- Do not support the proposal for the reasons listed below.

Comment regarding the impact this proposal has on 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 Bachelor's in Allied Health

Initiator(s): <u>Ellen Haneline</u> Proposal Contact: <u>Greg Zimmerman</u> Date Sent: <u>10/6/09</u> Department: <u>Clinical Lab, Respiratory, Health Systems Campus</u> Address: _____ (Please print)
--

Responding Department: <u>Clinical Laboratory, Respiratory, Health Administration</u> Chair/Head/Coordinator: _____ Date Returned: <u>10/7/2009</u>
--

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.

Most obvious impact of this proposal would be direct competition with the current BS in Health Care Services Administration program offered through the CAHS with the proposed program providing an advantage for students seeking degree completion in fewer credits and shorter timeframe overall. An additional impact may be experienced in stretching available resources such as faculty workload. Neither of these should prevent this proposal from being approved and moving forward.

### 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** Bachelor's in Allied Health

Initiator(s): <u>Ellen Haneline</u>
Proposal Contact: <u>Jim Wooleh</u> Date Sent: <u>10/8/09</u>
Department: <u>Accountancy, Finance, Information Systems</u> Campus Address: _____ (Please print)

Responding Department: <u>AFIS</u>
Chair/Head/Coordinator: <u>Dr. Jim Wooleh</u> Date Returned: <u>10/21/2009</u>

Based upon department faculty review on 10/20/2009 (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.

Need to know how many students might be coming to campus for ACCT 201.

# CURRICULUM CONSULTATION FORM

FORM B  
Rev 7/23/17

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 Bachelor's in Allied Health

Initiator(s): <u>Ellen Hanelke</u>	
Proposal Contact: <u>Kirk Waller</u>	Date Sent: <u>10/8/09</u>
Department: <u>Mathematics</u>	Campus Address: <u>ASC 2021</u>
(Please print)	

Responding Department: <u>Mathematics</u>
Chair/Head/Coordinator: <u>Waller</u> Date Returned: <u>10/16/09</u>

Based upon department faculty review on 10/16/09 (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.

MATH 115 is fine, but you could also add MATH 117 as an option. Both courses require MATH 110 (or its equivalent) as a prerequisite. Since MATH 117 is a terminal course, mathematics faculty who teach this course feel less pressure about content coverage. In addition, MATH 117 includes a number of topics that might be more useful to allied health students than algebra alone.

## 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:** Bachelor's in Allied Health

**Initiator(s):** Ellen Haneline

**Proposal Contact:** Ellen Haneline **Date Sent:** 10/6/09

**Department:** College of Allied Health Sciences **Campus Address:** 200 Ferris Drive, VFS 209  
(Please print)

**Responding Department:** Languages and Literature

**Chair/Head/Coordinator:** Nate Garrelts **Date Returned:** 10/26/09

Based upon department faculty review on 10/20/09, we voted 22-0-1 to:

- 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.



COLLEGE OF ALLIED HEALTH SCIENCES

November 18, 2009

TO: Dr. Kirk Weller, Department Head Mathematics  
FROM: Dr. Ellen Haneline, Dean- College of Allied Health Sciences  
RE: Concerns raised as a result of your department's review of curriculum proposal

Thank you for your careful review of the curriculum proposal for the Bachelor of Science degree in Allied Health Sciences. On your form B, you suggested that we consider adding MATH 117 as an option for students to complete their mathematics requirement. After discussion, we determined that although MATH 117 does fulfill the general education requirement, the preferable course is MATH 115. Many of the students who have expressed interest in the degree are utilizing it as a platform for entry into graduate school in areas such as Public Health Administration, Health Care Administration, Health Informatics or several of the other more specific areas. After investigation of the entrance requirements for sample graduate programs in those areas, we determined that the background afforded the student through completion of MATH 115 is more advantageous for the students.

Should a student opt to complete MATH 117, we would not require that they complete MATH 115 in addition.



COLLEGE OF ALLIED HEALTH SCIENCES

November 18, 2009

TO: Dr. Jim Woolen, Department Head-Accountancy, Finance and Information Systems  
FROM: Dr. Ellen Haneline, Dean-College of Allied Health Sciences  
RE: Concerns expressed as a result of your department's review of curriculum proposal

Thank you for your careful review of the curriculum proposal for the Bachelor of Science degree in Allied Health Sciences. On the form B, you asked about the number of students that might be coming to campus to complete ACCT 201. Because this is a degree designed primarily for off-campus students who will not be coming to campus to complete degree requirements, the impact upon the enrollment in ACCT 201 caused by this degree implementation is expected to be negligible. I would anticipate that there would be no more than an additional 20 students per year that may enroll on campus.

## FORM D-proposed

### FERRIS STATE UNIVERSITY COLLEGE OF ALLIED HEALTH SCIENCES

#### Bachelor of Science Degree- Allied Health

REQUIRED	ASSOCIATES DEGREE IN A HEALTH AREA (50 CR.) COMPLETED AS A PART OF ASSOCIATE DEGREE REQUIREMENTS	CR.
<b>GENERAL EDUCATION (41)</b>		
COMMUNICATION COMPETENCE – 12 Credits Required		
COMM 105 OR COMM 121 or COMM 221	Interpersonal Communication OR Fundamentals of Public Speaking or Small Group Decision Making	3
ENGL 150	English 1	3
ENGL 250	English 2	3
ENGL 321	Advanced Composition	3
SCIENTIFIC UNDERSTANDING -8 Credits Required		8
QUANTITATIVE SKILLS – 3 Credits Required		
MATH 115	Intermediate Algebra or ACT Math subscore of 24	3
CULTURAL ENRICHMENT – 9 Credits Required		
Select three courses from the following subject areas: ARTH, ARTS, FREN, GERM, HIST, HUMN, LITR, MUSI, SPAN, THTR. One course must be at the 200 level or above. One must meet global awareness requirement		
SOCIAL AWARENESS – 9 CREDITS REQUIRED		
Select three courses, one course must be at the 200 level above. One must meet race, ethnicity and gender requirement.		
<b>ALLIED HEALTH CORE – (31 CR)</b>		
CCHS 315	Epidemiology and Statistics	3
CAHS 499	Capstone project	8
CAHS 471	Trends in Health Care	3
CAHS 300	Health Care Information Systems	3
<b>Electives</b>	<b>Select from the following:</b>	<b>14 cr.</b>
CAHS 351	Gerontology for the Health Care Provider	3
CAHS 352	Health and Physical Aspects of Aging	3
CAHS 353	Health Care for Older Adults	3
CAHS 354	Contemporary Policies, Issues and Trends in Aging	3
PHIL 320	Biomedical Ethics	3
SOCY 340	Minority Groups in America	3
ACCT 201	Accounting 1	3
HCSA 202	Health Care Law 1	3
HCSA 210	Health Care Finance 1	3
HCSA 310	Health Care Finance 2	3
HCSA 336	Health Care Supervisory Practices	3
HCSA 225	International Health Care	3

HCSA 326	Health Care Personnel Practices	3
HCSA 460	Principles of Long Term Care	3
CAHS 317	Public Health	2
HCSA 410	Health Care Finance 3	4
HCSA 402	Health Care Law 2	3
HCSA 475	Practice Management	3

The student will be required to complete additional credit hours to fulfill the graduation requirement of 122 semester hours.

**Term by term plan for students.** The curriculum plan below is an estimation of the time that a student will require to complete the courses. Because this curriculum is developed for part-time, working adults the actual schedule will vary depending upon the circumstances of the student's work schedule, the frequency with which courses are offered and the desires of the student. It should, therefore, be considered to be advisory.

Semester 1			Semester 2		
ENGL 321	Advanced Composition	3	CAHS 300	Health Care Information Sys.	3
CAHS 315	Epidemiology and Statistics	3	Cultural Enrichment elective		3
Social Awareness elective		3	General electives		6
General elective		3			
		12			12
Semester 3			Semester 4		
Directed elective		9	Social Awareness elective		3
General elective		3	Cultural enrichment elective		3
			Directed electives		3
			Elective		4
		12			13

Semester 5		
CAHS 471	Trends in Health Care	3
Directed elective		2
CAHS 499	Capstone project	8
		13

## NEW COURSE INFORMATION FORM

**Course Identification:**

<b>Prefix:</b>	<b>Number</b>	<b>Title</b>
CCHS	471	Trends in Health Care

**Course Description:**

This course is designed to enable the student to develop an understanding of and appreciation for the developing trends in health care both within and outside of their particular specialty. Students will be required to perform an in-depth analysis of one current trend in addition to a study of the socioeconomic, scientific and political forces that impact health care in the United States. Pre-requisite: program enrollment

**Course Outcomes and Assessment Plan:**

The course will:

1. identify emergent trends in health care on a local, state, national and international level
2. expand the students' knowledge of current trends in health care
3. require that students perform an in-depth analysis of a current trend

Student learning in the course will be assessed as follows:

Outcomes	Method	Criteria for success
Student will be able to identify emergent trends in health care	Weekly journal entry	90% of the students will be able to document emergent trends in health care in a weekly journal entry as reflected by documentation of a minimum of one new trend or revision of previously identified trend
Student will be able to discuss current trends in health care	Response to discussion questions or participation in discussion groups	90% of the students will respond to discussion questions with substantive contributions as measured by an average grade of 10 on the grading rubric
Student will be able to complete indepth analysis of one current trend in health care	Paper	90% of the students will document mid to high level analysis of at least one current trend in health care through preparation of a paper as measured by grading rubric. Students will earn a grade of 20 or more on the grading rubric

**Course Outline including Time Allocation:** This is a seminar course during which students will complete the following activities simultaneously. It is expected that each of the following activities will be ongoing throughout the semester, therefore 15 hours has been assigned to each.

- Identification of trends -15 hrs.
- Discussion of trends-15 hours
- Analysis of trends- 15 hours

# 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

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):  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

b. Number

c. Enter Contact Hours per week in boxes.

LECTure  LAB  INDEpendent Study – Check (x)

Practicum:  Seminar:

(Limit to 30 characters/spaces.)

d. Course Title:

e. College Code:

f. Department Code:

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

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

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

k. Levels: Check (x) x Undergraduate  Graduate  Professional

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

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

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

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

This course is designed to enable the student to develop an understanding of and appreciation for the developing trends in health care both within and outside of their particular specialty. Students will be required to perform an indepth analysis of one current trend in addition to a study of the socioeconomic, scientific and political forces that impact health care in the United States.

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.

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:**

<b>Prefix:</b>	<b>Number</b>	<b>Title</b>
CCHS	499	Capstone Project

**Course Description:**

The capstone project is the final course in the program. During the course, the student will utilize past knowledge to identify a project, investigate possible solutions and make a final proposal for implementation. Pre-requisite: enrollment in the program

**Course Outcomes and Assessment Plan:**

The course will prepare students to:

1. Utilize previously learned information in the development of a solution to an identified need
2. Conduct investigations to determine need
3. Make a professional presentation

Student learning in the course will be assessed as follows:

Outcomes	Method	Criteria for success
Student will be able to conduct investigations to determine need	Needs assessment Library Research	90% of the students will be able to determine a need within their specialty area
Student will be able to utilize previously learned information in the development of a solution to an identified need	Project proposal	90% of the students will be able to develop a proposal to address identified need
Student will be able to make a professional presentation	Presentation	90% of the students will be able to make a professional presentation pertaining to their project proposal

**Course Outline including Time Allocation:**

Needs assessment techniques (surveys, interviews, observations); performance of needs assessment -40 hours  
 Proposal Development – 48 hours  
 Presentation (development, strategies and implementation)- 32 hours

# 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

- Complete each item in Section I and Section II.
- 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):  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

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 x Fixed  h. Minimum Credit Hours  i. Maximum Credit Hours

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

k. Levels: Check (x) x Undergraduate  Graduate  Professional

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

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

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

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

The capstone project is the final course in the program. During the course, the student will utilize past knowledge to identify a project, investigate possible solutions and make a final proposal for implementation.

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.

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 \_\_

**Special emphasis within degree:**

The curriculum has been designed to allow students to pursue different avenues during their degree completion: a certificate in gerontology; a broad general exposure to health care management; specialization in health care finance; or a specialization in personnel practices in health care.

**Other Considerations:** None

**Expected implementation date:** Fall, 2010

**Articulation:** The proposed degree will build upon already established articulation agreements between the College of Allied Health Sciences and numerous community colleges within the state of Michigan. Once the degree has been approved, articulation will be sought for the program with Grand Rapids Community College, Delta College, C.S. Mott College, Southwest Michigan College, Northwest Michigan College, North Central Community College, Alpena Community College, MidMichigan Community College and West Shore Community College. As demands increase, other articulation agreements will be sought.

**Accreditation:** There is no accreditation available for this program.

**Licensure/Certification:** There is no licensure/certification available for graduates of this program.

**Need for proposed degree/program:**

1. **Offerings by neighboring institutions:** The following Michigan universities offer similar programs: Grand Valley State University: a BS program that prepares students for entry into other allied health professions such as physical therapy, physician assistant and occupational therapy. Students are required to have a major in one of the various health care programs offered by the university and is not similar to the program at Ferris that requires the student to have completed the field education prior to entry. Oakland University has a +2 program identical to that proposed by this proposal. It has been designed specifically for graduates of the 2-year allied health programs at Macomb Community College. Saginaw Valley State University and the University of Detroit Mercy both offer a related degree that is designed to meet the needs of practicing professionals.

**Relationship to current university programs:** The bachelors degree in allied health sciences' curriculum is closely aligned with that of the bachelors degree in Health Care Systems Administration. It allows students to select courses from the Health Care Systems Administration program's curriculum in fulfillment of the elective requirements. Enrollment in the Health Care Systems Administration program has grown steadily during the past three years to a current enrollment of 367 students (on and off campus combined). It is expected that the currently proposed program will reduce the numbers of students enrolled in the Health Care Systems Administration program at the off campus sites because it is more user friendly to working adults. Existing curriculum in the Health Care Systems Administration program is very focused and does an excellent job of preparing graduates for a role in management, supervision and leadership of health care agencies and facilities. However, it does not provide an opportunity for an individual to utilize the majority of credits that they have already earned in a health field in fulfillment of degree requirements and has become increasingly unattractive to prospective students.

**Compile data collected regarding demand by employers, profession, industry:**

**Expected number of majors:**

In year 1-30; year 3-100; year 5-120 students will be enrolled. Graduates by year 3 will number 50 and by year 5-120. These estimates are based upon the proposer's experiences with off campus programming and data compiled by the College of Professional and Technological Studies office staff that indicates that 200-300 people inquire about this degree on an annual basis. The usual ratio of inquiries to registrants for health programming is one enrollee for each five inquiries. Because this is a program offered to working adults, the graduation rate is lower than for full-time on-campus students.

**Number of undergraduate majors (for ladderred and graduate programs only).** The following information is based only upon information from Ferris graduates from the allied health programs:

**Number of declared majors for three preceding years in anticipated feeder associates programs:**  
**Number of graduates for three preceding years.**

Year	Program	Enrolled	Graduated
2004-2005	Respiratory Care	51	14
	Radiography	94	47
	Diagnostic Medical Sonography	33	12
2005-2006	Respiratory Care	102	26
	Radiography	80	41
	Diagnostic Medical Sonography	30	4
2006-2007	Respiratory Care	135	42
	Radiography	70	40
	Diagnostic Medical Sonography	26	14

Data is not available for programs other than Ferris' however, the average size of Respiratory Care programs in the state is 24; of Radiography 20; and of Diagnostic Medical Sonography 12. There are 7 other Respiratory Care programs in Michigan with a potential for 168 graduates; 13 other Radiography programs for a potential of 260 graduates and 9 other Diagnostic Medical Sonography programs with a potential of 108 graduates on an annual basis. The program's target audience, however, is not newly graduated health care professionals, but rather health care practitioners who have experience and desire to upgrade their position or as a stepping stone for graduate school. Inquiries received by the regional offices of CPTS average 5 per week which would indicate that there are approximately 250 prospective students interested in the program at this time.

**Existing/additional support and resources:**

**Faculty:** Courses will be taught by existing faculty and/or adjunct faculty members. At the onset of the program, there will be no additional faculty resources required. However, if the program reaches or exceeds the expected potential, faculty loads will be shifted from instruction in the Health Care Systems Administration program to the Bachelors in Allied Health Sciences program.

**Facilities:** Courses will be taught in existing classroom space and/or on-line and therefore will not require additional facilities

**Library Resources:** Library resources are adequate to meet the needs of the program.

**FORM C**  
Rev. 07/2/09

### 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:** Bachelor's in Allied Health

**Projected number of students per year affected by proposed change:** 50

<b>Initiator(s):</b> <u>Ellen Haneline</u>
<b>Proposal Contact:</b> <u>Allison Konieczny</u> <b>Date Sent:</b> <u>10/6/09</u>
<b>Department:</b> <u>FLITE</u> <b>Campus Address:</b> <u>FLITE</u> (Please print)

<b>Liaison Librarian Signature:</b> <u>Allison Konieczny</u> <b>Date:</b> <u>10-12-09</u>
<b>Dean of FLITE Signature:</b> <u>Dea M. Mangan</u> <b>Date Returned:</b> <u>10-12-09</u>

Based upon our review on \_\_\_\_\_ (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.**

*Courses added to create program have many library resources available to support the curriculum.*

**Equipment, computers:** There are no additional computers or pieces of equipment necessary for the proposed program.

**Budget Implications of Curriculum Changes:**

**Proposed revenue from curriculum:** The following is based upon the assumption that there will be 24 students enrolled in each course and that the tuition will remain stable at \$315/cr. hour and is therefore somewhat conservative. Instructor salary is calculated at the overload rate of \$75/contact hour with the assumption that the courses will be taught primarily by adjunct faculty or on an overload basis. If taught in-load, the cost will vary according to faculty pay rate.

Revenue from tuition	\$235,104
Cost of instruction- faculty salaries	-\$40,050
Cost of instruction- adjunct faculty benefits and travel reimbursement	-\$10,000
Miscellaneous supply and expense cost	-\$2250 (\$250 per course)
Net revenue per cohort of 24 students	\$182,804

**End-of-Program Outcomes and Outcomes Assessment Plan:**

Outcomes Statement and Assessment Plan:

The bachelor's of science in allied health will prepare students to:

1. advance in their chosen specialty
2. apply previously learned knowledge to the completion of a project within their specialization
3. identify trends in health care
4. possess the requisite degree to apply to graduate school

Assessment Plan:

Goal/objective	Evaluation method	Evaluation period	Responsible party
50% of the graduates will seek and obtain employment in a position that has more responsibility/higher pay than the position held at the time of enrollment in the program	Graduate survey	1 year following graduation	Off campus coordinator
95% of the students will demonstrate the ability to apply previously learned knowledge	Project	At the completion of CAHS 499	Course instructor
95% of the students will be able to identify future trends in health care	Paper	At the conclusion of CAHS 471	Course instructor
10% of the graduates will be enrolled in a masters program	Graduate survey	1 year following graduation	Off campus coordinator

## **Program Marketing and Recruitment**

The program will be marketed through the College of Professional and Technological Studies. Information about the program will be located on the websites of both the College of Allied Health Sciences and the College of Professional and Technological Studies, off-campus advisors for all programs within the College of Allied Health Sciences will appraise prospective students and academic advisors at community college partners of the program's existence.



Leonard Johnson/FSU

02/16/2010 11:48 AM

To Ellen J Haneline/FSU@FERRIS

cc Ronald A McKean/FSU@FERRIS, Thomas W Hollen/FSU@FERRIS, Sandra L Alspach/FSU@FERRIS, Leonard Johnson/FSU@Ferris, Andrew L

bcc

Subject Re: Bachelor of Science in Allied Health

Hi Ellen

That is the first time someone addressed concerns before I had a chance to send out an email! Thanks. I'll let you know if there are any other changes needed on this proposal.

Just a heads up on another proposal, though...We also received a proposal to create a new degree in Energy Systems Engineering from the College of Technology. That proposal calls for the addition of a new course to be offered by your college, CAHS 208 Environmental Regulations 1. CAHS 208 will need to be approved before we'll be able to act on that proposal. Any help you might provide in expediting the creation of CAHS 208 would be greatly appreciated!

Thanks.

Leonard

Leonard R. Johnson, Ph.D  
Professor of Education and Chair,  
Strategic Planning and Resources Council  
University Curriculum Committee  
Ferris State University  
1349 Cramer Circle  
Big Rapids, Michigan 49307  
(231) 591-2134  
<http://www.ferris.edu/education/education>

Ellen J Haneline/FSU



Ellen J Haneline/FSU

02/16/2010 10:37 AM

To Leonard Johnson/FSU@Ferris

cc

Subject Bachelor of Science in Allied Health

Hi Leonard,

Don Flickinger shared the minutes from your meeting on Monday and I noted that there were several concerns about the BS in AHS degree. Hopefully, I can address those with this memo and the changes that are made in the attached document.

As I read the document, your concerns were:

1. There is no CAHS 316- you are correct, I mistyped the course number, it is actually CAHS 317, a course that was formerly EHSM 317 but whose course designator was changed on 3/31/09 (effective this semester) to CAHS 317. I don't believe it should be an issue because it was recently redone.

2. CAHS 447 (actually CAHS 477) and CAHS 499 needing prerequisites. I modified the Forms E and F to show that the prerequisite is enrollment in the program.
3. Concern about the program outcomes. I deleted the 2 as you suggested. Our thought in their inclusion was to be able to measure the efficacy of the program in preparing students for their future...but this requires assessment at a point beyond the end of the program. Although they are not stated in the curriculum document, it will be valuable information for us as we move forward.

Please let me know if this addresses the concerns of the UCC.

Thanks.

Ellen

[attachment "BS in Allied Health proposal -final doc 11-09.docx" deleted by Leonard Johnson/FSU]

Ellen Haneline, Ph.D.  
Dean College of Allied Health Sciences  
Ferris State University  
Big Rapids, MI 49307  
231.591.2269

To: University Curriculum Committee

From: Cindy Konrad, Marcy Parry, Marie Sickelsteel

Date: February 3, 2010

Subject: Bachelor of Science in Allied Health Degree

The following is a list of concerns of the faculty that did not support (voted no) the proposal for the Bachelor of Science in Allied Health on January 26, 2010.

A brief history of this degree and the faculty meeting:

1. The idea for this degree was presented to the Health Care Systems Administration (HCSA) faculty in summer of 2009. After a subcommittee researched the idea it was brought back to the full HCSA faculty and deemed not suitable as a quality degree from Ferris State University.
2. On Friday January 22, 2010 an email was sent to all CAHS faculty with the agenda for the faculty meeting for January 26, 2010 including an attachment for the new degree. This was the first we had heard of its existence.
3. At the faculty meeting there was insufficient time permitted for discussion of the degree before a vote was taken.

Concerns about this degree:

1. This degree appears to offer monetary value to the university rather than to provide educational value to the student. It is not designed to provide entrée' for an entry-level position yet students may perceive that it does have that value.
2. The written admission requirements for this degree do not match the limited discussion comments in the faculty meeting. **This degree is touted as a degree for in-place health care workers with an associates' degree in health care** (which could have educational value) yet the admission requirements do not state that. Nothing prevents students pursuing an associate's degree in health care from taking the majority of courses that lead to this bachelor degree.
3. Students could take all but 11 hours of this bachelor degree without acceptance into the degree. Without acceptance into the degree, students would not have a designated advisor, thus students would be self-advising for a significant portion of the degree.
  - This is not good education. Any potential value that could be gained by coordinated course selection is lost.
4. An advocate does not exist for this degree. There appears to be no plan for designated faculty to teach, advise or develop the new courses for this degree.

5. This degree lowers the College of Allied Health Sciences standards to meet the needs of the students rather than holding onto the standards of excellence required of all our graduates.
6. This degree has the potential to be in direct competition with the current HCSA degree given the stated admission requirements.
7. This degree could be confusing to employers as our current HCSA degree has gained a positive reputation in the health care field. The new degree contains many HCSA courses, thus, employers may not understand this and believe the person has the more rigorous degree. This would damage the straight HCSA degrees reputation.
8. FSU HCSA interns/students are frequently compared to interns/students from other universities, including graduate students. The FSU HCSA interns/students receive a higher ranking than the students from the other universities, thus, concluding that FSU HCSA interns/students are well prepared for healthcare jobs and they are an asset to any health care organization.

We acknowledge that many working employees in the health care field are recognizing a need to earn a bachelor degree to supplement their associate degree. The evolving nature of our field requires higher-level degrees to retain employment or to secure promotions. We believe that Ferris can offer a degree to serve this workplace market, while not competing with existing degrees, if it is properly developed and marketed. The following recommendations would support proper development and marketing.

Recommendations:

1. Modify the admission requirements to clearly identify the intended market, i.e., in-place health care workers with a health care associate degree and appropriate licensure and/or registration.
2. Identify a plan for designated tenure or tenure-track faculty to advise, teach and develop the new courses.



## 1. Proposal Summary

We have great opportunities to attract new students and place graduates into both traditional and alternative/renewable energy fields. Energy represents a huge portion of both National and State investment, and has been made a priority by the government. There has found to be a large demand by students for programs in this area. A survey of job sites found approximately 500 positions at EnergyPlacement.com. CareerBuilder.com lists 4541 positions. Monster.com lists 1592 positions. A survey by The Association of Energy Engineers on Green Jobs, of their membership, with 978 responses (<http://www.aeecenter.org/shows/PDFs/SurveyofTheGreenEnergyIndustry.pdf>), found:

Forty-one percent (41%) of the energy professionals, who were surveyed, plan to retire in the next ten years.

Seventy-two percent (72%) of energy professionals indicate a heightened shortage of qualified professionals in the energy efficiency and renewable energy fields in the next five years. Seventy-two percent (72%) of energy professionals indicate a heightened shortage of qualified professionals in the energy efficiency and renewable energy fields in the next five years.

Seventy percent (70%) of energy professionals indicate a need for national and state training for "Green Jobs" to address job shortages that are impairing growth in green industries, such as energy efficient buildings and construction, renewable, electric power, smart grid, energy efficient vehicles and biofuels development.

Eighty-seven percent (87%) have graduated from a four-year accredited college.

The energy and closely associated Buildings/Process/Instrumentation control fields have a very large requirement for engineers that can apply science and technology to design and implementation of systems. There is a very strong necessity for engineers for energy applications associated with: transmission and distribution of electricity, electrical grid control, alternative energy applications (wind, bio-fuels, fuel cells, etc.), conventional and nonconventional power generation, chemical processing, energy efficiency, etc. The current drive to develop and implement alternative/renewable energies and energy efficiency related technologies in buildings and products, further enhances the career opportunities for these graduates.

A number of industries, such as Cascade Engineering, Schneider Electric, etc. have expressed a real interest in the degree. A recent discussion with Kara Caskey from Schneider Electric, she stated "it seems that the program will be a good fit with what we look for in students". This has been echoed by other companies.

This degree and its applications are ideal for the type of education that Ferris can provide – a practical engineering program that applies a variety of technologies and sciences to control and create processes. An engineering degree has several advantages for both graduates and the college:

- The program will seek to be an EAC-ABET accredited degree. This will enable graduates to obtain a professional engineering license, which will be required for students working on public sector projects.
- For Canadian students, licensing is necessary to practice engineering.
- The degree can be marketed to students interested in entering an energy career as an engineer.
- The academic curriculum emphasizing quantitative skills, advanced chemical and physical sciences, and application of science and engineering to controls, applies well to an engineering curriculum.
- Targeted position requirements, include an engineering degree.
- A high interest by a number of companies in the program, both as Advisory Board members and its graduates.

The program is created with three (3) paths for the students, because of the diverse sources and use of Energy.

1. **Building Energy Systems** – Study of energy use in a building and alternative sources for the building.

2. **Alternative Energy Systems** – Study of wind, solar, bio-fuels, etc and their positioning, design and applications.
3. **Energy Generation and Distribution Systems** – Study of how generation and distribution of energy is controlled, both on local and regional grids and its relation to the “Smart Grid”.

The curriculum allows the student to take courses from other options to broaden their skill set. Master level programs are available in this degree from other institutions, such as University of Michigan.

### **Program Mission**

The Energy Systems Engineering degree seeks to provide a thought-provoking learning environment to prepare students for the challenges this country faces in solving its energy problems.

### **The Objectives of the Program**

Upon completion of the BS Energy Systems Engineering degree, graduates will be able to:

1. Find employment in a discipline appropriate to the degree in the field of energy systems.
2. Further their education either by pursuing advanced degrees or with continuing education.
3. Be able to advance to a supervisory or other higher position with an employer.

### **Program Outcomes**

1. Student will have an ability to apply knowledge of mathematics, science, and engineering
2. Student will have an ability to design and conduct experiments, as well as to analyze and interpret data
3. Student will have an ability to design a system, component, or process to meet desired needs within realistic constraints such as economic, environmental, social, political, ethical, health and safety, manufacturability, and sustainability
4. Student will have an ability to function on multidisciplinary teams
5. Student will have an ability to identify, formulate, and solve engineering problems
6. Student will have an understanding of professional and ethical responsibility
7. Student will have an ability to communicate effectively
8. Student will have the broad education necessary to understand the impact of engineering solutions in a global, economic, environmental, and societal context
9. Student will have a recognition of the need for, and an ability to engage in life-long learning
10. Student will have a knowledge of contemporary issues
11. Student will have an ability to use the techniques, skills, and modern engineering tools necessary for engineering practice.

## **2. Summary of All Course Action Required\***

### **a. Newly Created Courses to FSU:**

	Prefix	Number	Title
1.	ENGY	323	Energy Cradle to Grave
2.	ENGY	420	Energy Generation from Wind and Solar
3.	ENGY	430	Energy Systems Engineering – Alternative Energy Generatio
4.	ENGY	433	Energy Generation and Distribution Systems

### **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
1.	MECH	122	Computer Applications
2.	MECH	211	Fluid Mechanics
3.	MECH	222	Machine Design
4.	MECH	223	Thermodynamics
5.	MECH	311	Finite Element Analysis
6.	MECH	340	Statics & Strength of Materials
7.	MECH	341	Statics & Strength of Mat'ls Lab
8.	MECH	330	Heat Transfer
9.	MECH	332	Mechanical Measurements/Mechatronics
10.	MECH	393	ENGY - Internship
11.	MECH	421	Senior Lab.
12.	MECH	499	Senior Project
13.	EEET	201	Electrical Fundamentals
14.	EEET	301	Controls For Automation
15.	EEET	313	Elect. Power & Machines
16.	EEET	323	Ind. Automation Controls
17.	EEET	414	Ind. Process Communications
18.	MFGE	423	Engineering Economics
19.	MFGE	341	Quality Science Statistics
20.	FMAN	321	Principles of Facilities Management
21.	HVAC	337	Mech. & Elect. Systems for Buildings
22.	HVAC	483	HVACR Building Systems
23.	SURE	331	Ethics-Prof in Engineering-Tec
24.	ETEC	140	Engineering Graphics Comprehensive
25.	PHYS	241	General Physics 1
26.	PHYS	242	General Physics 2
27.	MATH	220	Analytical Geometry-Calculus 1
28.	MATH	230	Analytical Geometry-Calculus 2
29.	MATH	330	Differential Equations
30.	CHEM	121	General Chemistry 1
31.	BIOL	111	Environmental Biology
32.	CAHS	208	Environmental Regulations 1
33.	ENGL	150	English 1
34.	ENGL	250	English 2
35.	ENGL	311	Advanced Technical Writing
36.	COMM	121	Fundamentals-Public Speaking
			Cultural Enrichment
			Social Awareness

e. Removal of existing FSU courses from program

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

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



# FERRIS STATE UNIVERSITY

## COLLEGE OF TECHNOLOGY

From: Tom Oldfield, Dean

To: University Curriculum Committee

Re: Statement of Support

Energy has been identified by the College of Engineering Technology as an ideal growth opportunity well suited to our character and stakeholders. Over the past several years, the college has invested considerable resources in order build on our energy expertise and to establish recognition statewide.

Energy related efforts have included active involvement with multiple state and national energy organizations, membership in the West Michigan Higher Education Consortium (energy focused), aggressive pursuance of energy related grants, achievement of energy based collaborations, discussions of institutional collaborations (Michigan, Canadian, and International), hosting the Michigan Energy Conference (April will be year 3), hiring a full time energy coordinator in the college's Corporate and Professional Development, etc. The BS Energy Systems Engineering degree provides an integral next step to advance our strengths in this growing field.

To clarify our position on some of Professor Hollen's responses -

- The College intends to support this degree through re-allocation of S & E and faculty resources.
- This new engineering degree will be marketed to a different pool of students. A minor or certificate will result in very limited benefit to enrollment or industry needs and relies primarily on existing students willing to take on additional courses. . A non-engineering degree creates obstacles and limitations in graduate's career options and licensing.
- We fully expect the curriculum to evolve once established. However, the proposed curriculum is a practical launch point. Its learning outcomes correspond to its courses and compares favorably to similar curriculums.
- We have experienced strong interest from community colleges as well as interest from industry, perspective students, and foreign institutions.

Economic conditions, redefinition of the roles and methodologies in higher education, and ever evolving technologies, require us to move forward. This new degree proposal offers an excellent opportunity for positive achievement.

1009 Campus Drive, Johnson 200  
Big Rapids, MI 49307-2280

Phone: (231) 591-2890

Fax: (231) 591-2946

Web: [www.ferris.edu/technolo](http://www.ferris.edu/technolo)

## Concerns voiced by faculty for Energy Systems Engineering Degree:

To: CET Curriculum Committee

From: Lee Templin, Construction Technology & Management Faculty

Date: 04 January 2010

Subj: Comments regarding my vote of Support with Concerns in regards to the Bachelor of Science in Energy

1. My major concern is the lack of calculus based engineering fundamental courses, yet the course will be applying for ABET accreditation. The pre-requisites and the courses that lay the engineering fundamentals are currently not calculus based.
2. A second concern is the lack of energy specific courses in the proposed curriculum sheet. When reviewing other energy degrees, those degrees have more energy specific courses than in this proposed degree.

### Response to Lee Templin:

1. It is true that several of the courses offered by the Mechanical Engineering Technology Program, and used in this program are not calculus based, but calculus is used in MECH 330, Heat Transfer, MECH 421, Senior Lab., and MECH 499, Senior Project. It will also be used in ENGY 323, ENGY 433, ENGY 420, and ENGY 430. This is based on the books, currently selected for these courses. The book used for MECH 223, has sections in each area of Calculus for understanding. It is up to the instructor, how much of this is used in the classroom.

We are aware that for ABET accreditation we will need to upgrade several courses, but to start the program without creating at least nine (9) more new courses, existing courses were used. If you look at the Surveying Engineering Degree, they use CONM 221 for Statics & Strength of Materials. This course does not have any additional requirements than MECH 340, Statics & Strength of Materials. This is acceptable to ABET. Why wasn't it used? MECH 340 has a laboratory class, MECH 341 which is coordinated on topics with the lecture in MECH 340.

We consider that the program will be in flux as it develops. But, by the time the program can be submitted to ABET, it will meet the requirements, which currently do not exist under ABET for a Energy Systems Engineering degree.

2. The program has four courses which have a "ENGY" prefix. But, MECH 211, Fluid Mechanics, MECH 223, Thermodynamics, MECH 330 Heat Transfer, HVAC 337, Mech & Elect. Systems for buildings, HVAC 483, HVACR Building systems, EEET 414 Ind. Process Control, EEET 323, Ind. Automation Controls, EEET 301, Controls for Automation, EEET 201, Electrical Fundamentals, CHEM 121, General Chemistry 1, are all energy based courses.

The student from the program will not be just a solar, wind engineer. Energy takes many forms and usage, control, generation, alternate uses, and conservation goes beyond just the four courses.

Many programs have little or no energy course prefixes. Also, the program should not be compared to community college programs. An Energy Systems Engineering degree at the University of Ontario, has nine energy related courses, where we have four, but they cover the same subjects. The Ontario program also is composed of 135 semester hours, with no internship, which compares to 132 semester hours for our program with 4 credit hours of internship. Their program does have all the standard energy type courses, such as Thermodynamics, fluids, etc.

**To:** Ron McKean  
**CC:** +  
**From:** Larry Schult  
**Date:** 12/23/2009  
**Re:** Energy Systems Engineering Curriculum - Approve With Concerns

---

**Ron,**

Here is my response which identifies the concerns that I have regarding the Energy Systems Engineering Degree Proposal, and my vote of support with concerns:

A lot of the concern that I have is based on past experience with offering a new BS Degree program prior to teaching core coursework (experimental or not) to evaluate student interest and verify recruitment venues. Even though industry projects a major educated population need, it is just that, a projection. Offering a curriculum as a certificate, minor, or a culminating 2 year BS Degree track makes much more sense to me based on past experience (the rubber degree). I think that could be easily done out of the Mechanical Engineering Program as it seems a sub-set of that program.

I also agree that the degree is lacking core energy focused curriculum/coursework. I understand that the focus is for a registered engineering degree. But, what makes it uniquely different that would attract students to Ferris from other state or national university programs?

I do not see where the pool of interested students (for recruitment) is. If there already was a strong push for energy coursework at the high school or community college level, I would understand. But, that wasn't made clear (if investigated/identified) in the market study information given.

I agree that energy coursework or an energy degree is a very proactive and positive step for Ferris to take strategically. I just don't see it in this form at this time.

Respectfully submitted,  
Larry Schult

Response to Larry Schult:

1. Concern of offering a degree prior to teaching core course work or evaluating student interest. Paul Kwant of the recruiting office, has said that he has had numerous requests for an energy degree from students around the state. The school of CEMESS has had many inquiries from students and parents about the degree. The school was contacted January 17<sup>th</sup>, by a student that is enrolled for Fall and wants to start the program. Interest has been very high among students and industry for this type of program.

2. Attractiveness of Program. There are very few programs like this in the United States. There are similar programs at universities in Canada, Ireland and India. Canadian colleges have expressed an interest in the program where their students could obtain an engineering degree. As example is Lambton College in Sarnia, Ontario. Lambton has a 3 year advanced degree in energy, but their students cannot work as engineers. Only graduates of accredited universities can work as engineers. College credits will not transfer to universities, thus their students are dead-ended. They would like to be able to have their students transfer here and obtain an engineering degree. This interest has been expressed by other colleges in Canada.

More than 20 universities or colleges offer a master degree in renewable energy or energy systems engineering. Google searches of bachelor degrees find very little in energy systems engineering in this country. There are several renewable energy degrees offered, but these do not compare to the program being discussed. The program is very unique.

3. Concern: not at this time. To delay the implementation of the program is to lose the momentum that has already been developed. A number of industrial leaders in energy are on-board as well as students. Not to implement the program would lose what has been gained by questioning industry and government personal.



Mary Brayton/FSU  
12/21/2009 11:09 AM

To Ronald A McKean/FSU@FERRIS  
cc  
bcc  
Subject CET CC Energy Degree

Re: "Support with concerns" for the Energy Systems Engineering Proposal

My concerns are:

A formal market survey has not been conducted to justify the viability of the proposed degree, only favorable responses have been solicited from a handful of companies. The degree is light in the area of actual engineering courses in comparison to degrees offered by other universities.

Is it in the best interest of the program to offer class that compete with enrollment in current courses when the enrollment is already low? I would think that offering a minor or certificate would be a good way to test the interest levels and viability of the degree and also attract students from other program areas who have an interest in energy generation.

Mary Brayton  
Professor  
Architectural Technology & Facility Management  
(231) 591-3584

Response to Mary Brayton:

1. A survey has not been done of universities around the world. See point 2., under Larry Schult responses above. The program will not compete with existing programs at FSU as it is a higher level of math, physics and chemistry, which many students in MET are not interested in taking. It is expected that there may be students who cannot make it in the ESE degree, and they then could change to the MET or similar degree with very few adjustments. A survey was conducted of programs around the world. Only programs in Canada, Ireland and India appear to be very similar.

As there 12 courses which are offered under the MECH designation used in the program. It is expected that this will increase the teaching load in that area. Several of these courses are scheduled to be replaced which ENGY courses as the program develops. This would include MECH, Internship, MECH 421, senior lab, MECH 499, Senior project. Currently these courses will work with the ESE program to direct students into energy areas as they complete these courses.

2. Energy Generation. The program is not just about energy generation. The student will study energy from cradle to grave, but they will also study how it used and how to control it, and how to reduce it. Depending on their interest, they can look at how energy is used in building systems, how and what is alternative energy systems and how can they be applied, or they can study energy generation and distribution systems including the smart grid technology. We would also expect students to take courses in the other paths as electives, to broaden their knowledge.

3. Program is light in area of actual engineering courses in comparison to degrees offered by other universities. We are not sure what program the author is comparing to. The degree has a total 38 courses plus 9 social awareness and cultural enrichment courses. Of the 38, 30 are engineering courses or courses which are the foundation of engineering. In fact the University of Wyoming in its Energy Systems Engineering degree, lists 28 engineering or engineering related courses which are required.

4. Is it in the interest of the program to offer classes that compete with enrollment in current courses when enrollment is low. This program is not designed to compete with current programs as the math and physics level are higher and only students with at least an ACT of 26 or calculus in high school, will be admitted. As stated above, it will increase enrollment in certain MECH and EEET classes, and other programs will provide opportunities for students who don't meet the program's criteria, yet still want to pick up energy specific courses.

Michael L Hachman/FSU  
01/13/2010 02:05 PM

To Donna J Schmidt/FSU@FERRIS  
cc  
bcc  
Subject Re: Documentation of Curriculum Vote on Energy Proposal

Concerning my vote of NO on pending Energy Engineering B.S. degree

Comparison of proposed degree and existing Energy Engineering degrees from other institutions shows that the proposed degree is very shallow in the area of energy.

Proposed degree can have as little as one survey type Energy class in the entire curriculum which should hardly be enough to call it an Energy degree.

There was apparently no Energy Industry input prior to the design of the curriculum

There was no advisory committee formed prior to design of curriculum

No student surveys were done to document student demand for the degree

Michael Hachman

Response to Michael Hachman:

1. Program is very shallow in area of energy. See point 2., under Lee Templin above. The program has compared to other programs on an apple to apple basis. There are few programs to compare to. As has been said before, the costs to start a program with 10 or 20 new courses is prohibitive. But as the program develops, changes and additions will be made. Many changes will depend on laboratory equipment and space the program obtains. A number of grants requests and funding options are being considered.
2. Proposed degree can have as little as one survey type energy class should hardly be enough to call it an energy degree. The program currently has four course with an energy prefix and 10 courses which are energy related (see point 2., under Lee Templin above). Energy comes in many forms, and as the laws of physics says: It can neither be created nor destroyed, but can be transformed. The student needs to learn what can and cannot be done with energy. Just because the course does have a specific energy program prefix, doesn't mean the student isn't studying energy. The basis of Mechanical Engineering or Engineering Technology, is the study of forces and work (force applied through a distance). Energy is work and work is energy, but the study of energy goes in a different direction. How is energy used? How can it be created from a particular source? What is the efficient and effective use of energy? What are the systems we need to control it and use it in an efficient manner?

3. No advisor committee. Currently the Advisory Committee consist of:

Jeff Totten  
Chief Engineer  
Cascade Engineering

Fred Alatelo  
Business Energy Efficiency Programs Manager  
Consumers Energy

Mike Roberge  
VP Engineering & Operations  
Great Lakes Energy

Dan Solvinski  
Plant Engineer  
Ferris State University, President of West Michigan Association of Energy Engineers

4. No energy industry input into the program. First, the program was developed by a committee of people from MET, EEET and HVACR programs. Courses were included to meet ABET criteria for accreditation, also based on experience of committee members, such as Thomas Hollen, who has over 40 years of experience in the energy field, written books on energy auditing, and ran a consulting firm contracted to Consumers Energy, before joining Ferris State. The new Energy Director, Arn McIntyre was also consulted. Arn comes to Ferris, straight from the energy industry and has many national credential in energy use and standards.

Attendees at Michigan Future conference this fall were consulted. As a result we are currently talking with Western Michigan University about joint program. The program was also discussed with attendees at the MARC conference (Public Service Commissions from the Mid-West) in August, again a very favorable response. Several persons were contacted at the Ferris Energy Conference last April, and express interest in the program. Arn McIntyre and Tom Candall of FSU's Corporate Development Center, shared the program content with a number of people for feedback, all of which was positive.

---

**To:** College of Engineering Technology Curriculum Committee

**From:** Blaine Danley  
CET Curriculum Committee Representative

**Subject:** Rational for voting not to support the proposed degree in Energy Systems Engineering

**Date:** January 14, 2010

---

On December 14, 2009 I voted to not support the proposed degree in Energy Systems Engineering. My rational for not support this proposed degree is largely based on the following issues:

- I do not think that there are enough Energy Systems Engineering (ENGY) prefix courses in the degree. The proposed degree would have students graduating with as few as 3 credit hours in ENGY courses. This is a significant departure from the format of existing degrees within the CET which have over 18 credits unique to the degree. It was stated that we don't currently have the faculty resources to develop additional ENGY courses. If this is going to be a high quality degree it needs to be done from the start with the appropriate content.
- MATH 220, 230, and 330 are all required courses in the proposed degree but knowledge learned in these courses is not applied in any other courses. This is being done to make the degree an "engineering degree". I do not feel that simply adding calculus courses to existing engineering technology courses makes this an engineering degree.
- There is not a faculty member to "champion" this proposed degree.

I do in concept support the idea of creating a new degree offering related to energy. However, I feel that the existing proposal does not make this degree a high quality degree. I recommend that significant changes are made to this proposal and only the very best degree in energy be developed and offered at Ferris State University.

Response to Blaine Danely:

1. See answer to Michael Hachman in point 2. Above, and point 3. under Mary Brayton above. We are currently discussing with Western Michigan University the potential to offer a joint Energy Engineering Degree in Grand Rapids. A review of their proposed curriculum on enrgy and environment in Kalamazoo shows little if any courses with and "energy" prefix. A prefix does not make the course, the content does.
2. MATH 220, 230 and 330 are all required but not applied in any other courses. See response to Lee Templin, point 1. Calculus is a part of a number of courses, not just to satisfy ABET.

3. There is not a faculty member to champion this proposed degree. Not true. Prof. Thomas Hollen, who currently part of the faculty, is a heavy supporter of the program along with Professors Chuck Drake and Clare Cook, or they would not have spent the time creating the proposal.

To: Ron McKean, Associate Dean, College of Engineering Technology/  
Chair of College Curriculum Committee

From: David Murray, Associate Professor, Welding Engineering Technology 

Subject: No Vote Rational for Energy Engineering Degree

Date: January 13, 2010

This memo is a response to my "No Vote" for the proposed new degree in Energy Engineering. My only interest in this proposal is my responsibility as a program and college curriculum committee member. I have served in this role for nearly 25 years and have witnessed many successes and failures of programs. There are many flaws in this degree as presented so I will list them and later, give my recommendations for the corrections that should take place.

1. The degree needs to be its own degree, not a modification of a current MET degree. The program champion cannot compete for the same students as the other sister program. This will ultimately hurt the success of both programs. The students enrolled in this curriculum should be new to the college.
2. Four classes do not make you an energy engineer. The new curriculum should be loaded with between 40% and 50% energy-related courses. The multi track option will not succeed. All students who graduate with this degree should have taken the same technical courses. One of the Energy Engineering degrees options has only one three-credit energy course.
3. The degree should be an Engineering Technology not an Engineering degree. Ferris State's niche is Engineering Technology not Engineering. The college recently renamed itself Engineering Technology. It will appear to the outside that we don't know who we are or that we are trying to be like the other universities. The new program should be application and hands-on based. The math and science requirements of an engineering-based program take up course space and limit the number of new courses that should be in this program. The argument of PE requirements, I believe, is unfounded for few will ever seek this. For those who do, my recommendation is forthcoming.

4. An advisory board should have been formed and used in the creating of the curriculum. The letters of support are not clear to me whether or not they plan on hiring the graduates of this program. Talk is cheap. Who is going to hire these graduates?

5. The lack of support for this degree is disturbing. Most of the college faculty do not support this degree in its present format and I do not sense the interest from incoming high school students. To ensure the success of a new programmatic venture, there needs to be excitement generated amongst the faculty; a kind of "buzz" that sends the message of support and enthusiasm. The only "buzz" about this program is negative.

Consequently, I make the following recommendations:

1. Create a new Energy Engineering Technology Degree that stands by itself.
2. The new degree should have 40 % new technical courses, 25% technical-related and the balance comprised of FSU General Education requirements.
3. Create a PE track for those students who want to become "Professional Engineers". This will require additional time to complete the degree but will not hurt the application and hands-on focus of the main degree for the mainstream students.
4. A new faculty expert should be hired to formulate the degree and form a diverse advisory board with a commitment to hire these graduates. Tom Hollen's commitment to "being hired for the new School Director or retiring" is not the commitment needed for the birth of a new degree. A new degree takes ten years or more of extreme hard work for it to succeed. The WET program has many graduates and contacts in the energy field who would be glad to locate experts who would be willing to commit to your new advisory board.
5. The new formulated degree with a functioning advisory board will get the attention of all campus members and help create a positive buzz about this new program and help recruit for success.

I have discussed with you previously the need for a degree offering in energy conservation, recycling and environment-friendly practices. This curriculum could be utilized by students of the successful programs that currently exist at FSU or transfer students. I believe, as many of my colleagues, that this should be a graduate study and would be the logical first Masters Degree in the College of Engineering Technology. Another option would be a Certificate or a Minor of study. You have elected to go a different path and create a new BS degree program and I hope for the good of the University that you reconsider moving forward with the poorly-supported proposal and start over with a new direction. You and others have worked very hard on this proposal and I want you to know that I respect your work and our differences in philosophy. I will help you any way I can to ensure success at Ferris State.

Response to Dave Murry:

1. The degree needs to be its own degree, not a modification of a current MET degree. The MET degree was not considered a part of this degree, other than to use courses from which offer the subjects required for the degree. To start the degree with all its own courses would require 19 additional new courses, many of which would teach the same material. The cost would be prohibitive in the current economy. Students who have expressed an interest in the program have generally been new to the university. This is particularly true with students who would transfer into the program.

2. Four classes do not make a program. This speaks to the author's lack of knowledge of what is energy and the study of it. See point 2., under Lee Templin response above.

The use of MECH courses, is no different than the Welding Program using MECH, EEET, MFGE and MATL courses. Use of existing courses, where possible, is cost efficient and effective.

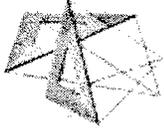
3. The degree should be an Engineering Technology Degree. The types of positions that students from the degree will work in, require a professional engineering license. Engineering Technology degrees do not allow students to obtain this in Michigan. While its true they could get a license in 35 other states, we do want students to be able to stay in Michigan. The ability to obtain the license also makes the program attractive to a number of foreign colleges, particularly in Canada, thus increasing the number of potential "new" students to Ferris.

As with the Surveying Engineering program, students will be encouraged to sit for the Professional Engineering Exam, just as they are in the MET program to sit for the Engineer In Training Exam.

4. An advisory board should have been formed and used in creating of the curriculum. See point 1, under Larry Schultz above. See point 3 and 4., under Michael Hachman above.

5. The lack of support for the program is disturbing. The lack of support from a minority of faculty appears to be coming from those programs which are threatened by the "Engineering" aspect of this degree. They seem to think this is a pretense of the future, where the college becomes "Engineering Programs". This is far from the truth, but there is a need to upgrade some of our programs and introduce new programs, if the university is to survive. Engineering programs do require a faculty with higher degrees and education, but a doctoral fellow is not required. The program has many applied components, thus requiring faculty with industrial or hands-on experience.

It should be noted that the curriculum of the degree was submitted to many departments and programs in the university. The response was very positive. Such as, it's about time!



Chuck Drake/FSU  
11/13/2009 12:41 AM

To Thomas W Hollen/FSU@FERRIS  
cc Ronald\_McKean@ferris.edu  
bcc  
Subject checksheet for energy systems

maybe you have gone over this -

The semester by semester plan side

a. Lee is right - there are four CE courses shown on this side. 137 credits. Since SURE 331 is a CE, the program needs only two more - and the "200 or higher" comment should be removed since SURE 331 meets the 200 requirement for CE as well.

b. One of the Social Awareness courses should have "200 or higher" noted.

c. Prerequisite flow. Since MECH 211 and 340 require physics, these need to move.

Suggest: Moving MECH 340 from F2 to S2

MECH 222 from S2 to S3

SURE 331 from S2 to S4

PHYS 242 from F3 to S2 (offered only in spring)

MATH 330 from S3 to F3 (offered only in fall)

MECH 211 from F2 to F3

MECH 341 from F2 to F3

Move COMM 121 and Cult Enrich from F3 as needed for balance

Move whatever else needs to be moved for balance

d. Suggest tidying up a bit - such as using same font and same text size throughout  
- getting rid of "Electives" that is in-between semesters near the bottom

e. Updating department name in footer - should that have an address other than a person to match the rest of CET checksheets?

Not really a checksheet matter, but I think Mary's suggestion on taking PLSC has merit - and taking ECON 221 has even more merit.

my 2 cents

see ya

Bachelor of Science in Energy Systems Engineering (BS ESE) Degree  
Summary of Support

Advisory Board members to date:

Jeff Totten  
Chief Engineer  
Cascade Engineering  
Grand Rapids, MI

Fred Alatelo  
Business Energy Efficiency Programs Manager  
Consumers Energy  
Jackson, MI

Mike Roberge  
VP Engineering & Operations  
Great Lakes Energy  
Boyne City, MI

Dan Solvinski  
Plant Engineer  
Ferris State University,  
President of West Michigan Association of Energy Engineers

Letters of Support:

Cascade Engineering, Grand Rapids, MI  
Cherryland Electric Co-op., Grawn, MI  
Chevron Energy Solutions Company, Ann Arbor, MI  
Consumers Energy, Jackson, MI  
Eco1Energy, Canton, MI  
Feyenzylstra, LLC, Grand Rapids, MI.  
Great Lakes Energy, Boyne City, MI  
Homeworks Tri-County Electric Cooperative, Portland, MI  
Mechanical Energy Systems, Canton, MI 48187  
Michigan Land Use Institute, Interlochen, MI  
Price, Heneveld, Cooper, DeWitt & Litton, LLP, Grand Rapids, MI  
Schneider Electric, Carrollton, TX.  
Smith Industries, Grand Rapids, MI  
Vestas Blades America, Inc., Winsor, CO.  
West Michigan Association of Energy Engineers, MI  
Whirlpool Corporation, St. Joseph, MI  
Wind4Power, Inc.

Community Colleges and Universities who have expressed interest:

Aquinas University  
Glen Oaks Community College  
Grand Rapids Community College  
Grand Valley State University  
Humber College, Ont., CA  
Kalamazoo Valley Community College  
Kellogg Community College  
Lambton College, Sarnia, Ont., CA  
MAREC (Michigan Alternative and Renewable Energy Center)  
Montcalm Community College  
Muskegon Community College  
Northwestern Michigan College  
West Shore Community College  
Western Michigan University - Desire to share resources to offer degree in Grand Rapids

Student Interest in Program:

We have been contacted by a number of students, though no actual count was kept, who found an article on the web, where President Eisler was quoted about the development of the Energy Systems Engineering Degree.

[http://www.mlive.com/news/bay-city/index.ssf/2009/09/ferris\\_state\\_celebrates\\_125\\_ye.html](http://www.mlive.com/news/bay-city/index.ssf/2009/09/ferris_state_celebrates_125_ye.html)

We currently have students who are accepted for Fall 2010 and wish to enter the ESE degree. There are also several students who are taking classes which would allow them to enter the ESE degree program. They have been told that the program doesn't exist and has not been approved as of yet. They still wish to take courses that are in-line with the program.

Alumni of Ferris have contacted the School to find out the status of the program, as they will be looking for graduates in the future. This is also true of several companies who contact the school on a regular basis to see what the status is.

The interest is significant, as the program has not been promoted outside the university, except to gather some support for the program, and comments by President Eisler.

Thomas W. Hollen, P.E.  
Interim Director, School of Computer, Electrical, Mechanical, Energy and Surveying Systems

Associate Professor, Mechanical Engineering Technology  
College of Engineering Technology  
Ferris State University  
915 Campus Dr., SWAN 405  
Big Rapids, MI 49307  
231-591-5282  
Hollent@ferris.edu

**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** Energy Systems Engineering

<p><b>Initiator(s):</b> <u>Thomas Hollen, P.E.</u></p> <p><b>Proposal Contact:</b> <u>Thomas W. Hollen</u>    <b>Date Sent:</b> <u>5/1/09</u></p> <p><b>Department:</b> <u>MDSN Campus</u>    <b>Address:</b> <u>405 SWAN</u>                  (Please print)</p>
---

<p><b>Responding Department:</b> • Arch Tech-Facility Mgmt</p> <p><b>Chair/Head/Coordinator:</b> <u>Diane Nagelkirk</u>    <b>Date Returned:</b> <u>6/1/09</u></p> <p style="text-align: center;"><u>DIANE L. NAGELKIRK</u></p>
---

Based upon department faculty review on 5/27/09 (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.

# Memorandum

To: Tom Hollen  
From: Diane Nagelkirk *DIANE NAGELKIRK*  
Date: 6/1/2009  
Re: Energy Systems Engineering Degree

---

The Architectural Technology and Facility Management Department supports this initiative in theory and believes it will be a viable degree. The Department also supports the opportunity for students to select an "Option" of study. However, we do have concerns related to the anticipated enrollment of 120 students. 120 students divided by 3 options equates to 40 students. We would not be able to accommodate 40 students in FMAN 321 with our current faculty load; in fact the most we could accommodate would be 8-10 students. Also HVAC 483 is a course that has been designed exclusively for our FM students. Class enrollment averages 25; so again the course would have limited open seats for students pursuing the Building Energy Option.

## 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** Energy Systems Engineering

<p><b>Initiator(s):</b> <u>Thomas Hollen, P.E.</u></p> <p><b>Proposal Contact:</b> <u>Thomas W. Hollen</u> <b>Date Sent:</b> _____</p> <p><b>Department:</b> <u>MDSN</u> <b>Campus Address:</b> <u>405 SWAN</u> (Please print)</p>
--

<p><b>Responding Department:</b> <u>Biology</u></p> <p><b>Chair/Head/Coordinator:</b> <u>Karen Strasser</u> <b>Date Returned:</b> _____</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.

Joseph Lipar/FSU  
05/21/2009 03:00 PM

To Thomas W Hollen/FSU@FERRIS  
cc  
bcc  
Subject Energy Systems Engineering Proposal

Thomas,

I received a Form B (Curriculum Consultation Form) for your Energy Systems Engineering Proposal. We don't see any reason not to support the proposal, but I was wondering how many students you anticipate will be going through the program on an annual basis. Thanks.

Joe Lipar  
Biology Program Coordinator

## 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** Energy Systems Engineering

<p>Initiator(s): <u>Thomas Hollen, P.E.</u></p> <p>Proposal Contact: <u>Thomas W. Hollen</u> Date Sent: <u>5/7/09</u></p> <p>Department: <u>MDSN</u> Campus Address: <u>405 SWAN</u> (Please print)</p>
---

<p>Responding Department: • College of Allied Health</p> <p>Chair/Head/Coordinator: <u>Dr. Ellan Haneline</u> <i>Ellan Haneline</i> Date Returned: <u>5/11/09</u></p>
---

Based upon department faculty review on 5/11/09 (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.

*ENGR 208 is no longer offered; however the college of Allied Health would be interested in offering the course under a new prefix and number (CAHS 208)*

## 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** Energy Systems Engineering

**Initiator(s):** Thomas Hollen, P.E.

**Proposal Contact:** Thomsa W. Hollen **Date Sent:** 2/18/09

**Department:** MDSN Campus **Address:** 405 SWAN  
(Please print)

**Responding Department:** Manufacturing Engineering Technology

**Chair/Head/Coordinator:** Gary Ovans *[Signature]* **Date Returned:** 2-18-10

Based upon department faculty review on 2-18-10 (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.

Addition of MFGE 341 to Energy Engineering Systems degree to meet pre-regs., of MECH 332.

## 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** Energy Systems Engineering

**Initiator(s):** Thomas Hollen, P.E.

**Proposal Contact:** Thomas W. Hollen    **Date Sent:** \_\_\_\_\_

**Department:** MDSN Campus    **Address:** 405 SWAN  
 (Please print)

**Responding Department:** Humanities

Chair/Head/Coordinator: Grant Snider \_\_\_\_\_    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.

## 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** Energy Systems Engineering

**Initiator(s):** Thomas Hollen, P.E.

**Proposal Contact:** Thomas W. Hollen **Date Sent:** \_\_\_\_\_

**Department:** MDSN Campus **Address:** 405 SWAN  
(Please print)

**Responding Department:** HVACR

**Chair/Head/Coordinator:** Mike Feutz

**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.

## 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** Energy Systems Engineering

**Initiator(s):** Thomas Hollen, P.E.

**Proposal Contact:** Thomas W. Hollen **Date Sent:** 5/7/09

**Department:** MDSN Campus **Address:** 405 SWAN  
(Please print)

**Responding Department:** Language & Litature

**Chair/Head/Coordinator:** Genevere West

**Date Returned:** 5/20/09

Based upon department faculty review on 5/20/09 (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** Energy Systems Engineering

Initiator(s): Thomas Hollen, P.E.  
Proposal Contact: Thomas W. Hollen Date Sent: 5/7/09  
Department: MDSN Campus Address: 405 SWAN  
(Please print)

Responding Department: MATHEMATICS  
Chair/Head/Coordinator: Dr. Kirk Weller Date Returned: 5/22/09

Based upon department faculty review on 5/22/09 (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** Energy Systems Engineering

Initiator(s): Thomas Hollen, P.E.

Proposal Contact: Thomsa W. Hollen Date Sent: 5/7/09

Department: MDSN Campus Address: 405 SWAN  
(Please print)

Responding Department: Manufacturing Engineering Technology

Chair/Head/Coordinator: Gary Ovans Date Returned: 5-11-09

Based upon department faculty review on 5-11-09 (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.

Change "MFGT 423"  
to  
MFGE 423

## 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** Energy Systems Engineering

**Initiator(s):** Thomas Hollen, P.E.

**Proposal Contact:** Thomas W. Hollen **Date Sent:** \_\_\_\_\_

**Department:** MDSN Campus **Address:** 405 SWAN  
(Please print)

**Responding Department:** Physical Science

**Chair/Head/Coordinator:** David Frank \_\_\_\_\_ **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.

## 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** Energy Systems Engineering

**Initiator(s):** Thomas Hollen, P.E.

**Proposal Contact:** Thomas W. Hollen **Date Sent:** \_\_\_\_\_

**Department:** MDSN Campus **Address:** 405 SWAN  
(Please print)

**Responding Department:** Social Sciences

**Chair/Head/Coordinator:** Joseph A. Karafa \_\_\_\_\_ **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.



## 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:** Energy Systems Engineering

**Projected number of students per year affected by proposed change:** 20

<b>Initiator(s):</b> <u>Thomas W. Hollen</u>
<b>Proposal Contact:</b> <u>Thomas W. Hollen</u> <b>Date Sent:</b> <u>5/4/09</u>
<b>Department:</b> <u>MDSN</u> <b>Campus Address:</b> <u>405 SWAN</u> (Please print)

<b>Liaison Librarian Signature:</b> <u>Fran Rosen</u> <i>Frances Rosen</i> <b>Date:</b> <u>5/11/09</u>
<b>Dean of FLITE Signature:</b> <i>Leslie M. Mangan</i> <b>Date Returned:</b> <u>5-11-09</u>

Based upon our review on 5/11/09 (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.**

## NEW COURSE INFORMATION FORM

### Course Identification:

<b>Prefix:</b>	<b>Number</b>	<b>Title</b>	
ENGY	323	Energy, Cradle to Grave	3+0 credits

### Course Description:

The student will study energy from its source, to its final usage and will understand the energy and carbon footprint of creating energy, transporting it converting it, using it. Losses and costs of energy production and usage will be studied. The course reviews past, present and future trends in global energy consumption, environmental concerns of energy generation, distribution and consumption, as well as a classification and comparison of energy sources.

### Course Outcomes and Assessment Plan:

- a. The Student will have knowledge of what energy is in its useful forms.
  - i. The student will be able to describe sources of energy.
  - ii. The student will be able to recognize a source of energy.
- b. The student will demonstrate knowledge of various sources of energy.
  - i. The student will express the energy content of a source.
  - ii. The student will be able to recognize what energy is required to develop a source into a useful form.
- c. The student will demonstrate the ability to analyze the energy input costs and losses to bring an energy source from its initial state to final form.
  - i. The student will know of providers of information to formulate energy content and losses of various sources of energy.
- d. The student will demonstrate the ability to evaluate energy sources as they affect the environment, social and economic issues.
  - i. The student will be able to compare energy sources in the relation to environmental issues.
  - ii. The student will recognize the social impact of a source of energy.
  - iii. The student will be able to analyze the economic costs of energy sources.
- e. The student will work effectively in teams.
  - i. Student will have the ability to work in teams to analyze energy flow from a source to final usage.
  - ii. Students will defend the team's decision of its evaluation of an energy flow.

### Course Outline including Time Allocation:

	UNIT TOPIC DESCRIPTION SUMMARY	LECTURE HOURS
I.	Introduction	1
II.	Energy – what is it, where does it go?	3
III.	Energy sources currently used in commercial, industrial and residential facilities.	4
IV.	Tracking of energy through its production, transportation and conversion to a useful product	4
V.	Study of energy consumed to produce a source	4
VI.	Study of losses occurring during production, transportation and conversion	6
VII.	Study how energy can be accounted for and the associated costs for various forms in terms of BTU's	7
VIII.	Team studies of an energy source through its lifetime, from cradle to grave using BTU Accounting Method.	12
IX.	Evaluation	2
X.	Final Examination -	2
	Total Hours	45

**NEW COURSE INFORMATION**

**Course Identification:**

<b>Prefix:</b>	<b>Number</b>	<b>Title</b>
<b>ENGY</b>	<b>420</b>	<b>Energy Generation from Wind and Solar, 4+0 credits</b>

**Course Description:**

The course introduces students to from solar and wind energy. Students will study site conditions requirements and potentials for generation based on several proposed projects at the university for electrical and heat generation from solar and wind power. Students will be study the strength and weaknesses of energy generation, in addition to mounting, maintenance and regulations regarding wind and solar equipment.

**Course Outcomes and Assessment Plan:**

1. The student will have an understanding of wind and solar energy conversion systems.
  - a. Student will be able to describe and discuss the basics of wind and solar energy systems
2. The student will have an understanding of the requirements of an effective wind and solar energy systems.
  - a. Student will be able to describe the requirements of wind and solar energy conversion systems.
3. Student will understand wind and solar characteristics and measurements.
  - a. Student will be able to analyze the characteristics of wind and solar energy systems.
4. The student will understand the controls required of wind and solar energy systems.
  - a. Student will be able categorize the controls need to effective operate a wind or solar energy system.
5. Student will have an appreciation of the economics of wind and solar power.
  - a. Student will be able to evaluate the economics of a wind or solar energy system.

**Course Outline including Time Allocation:**

NO.	UNIT TOPIC DESCRIPTION SUMMARY	LECTURE HOURS	LAB HOURS
I.	Introduction	2	
II.	Wind Speed, Energy and placement	8	
III.	Electrical Generators	5	
IV.	IO Foundation	4	
V.	Power, Electronics	6	
VI.	Plant Economy	8	
VII.	Sensitivity Analysis	4	
VIII.	Hybrid Economics	5	
IX.	Solar Site Analysis	4	
X.	Solar Storage	5	
XI	Solar Economics	5	
XII	Effects of Utility Restructuring	4	
	Total Hours	60	

**NEW COURSE INFORMATION FORM**

**Course Identification:**

<b>Prefix:</b>	<b>Number</b>	<b>Title</b>	
ENGY	430	<b>Alternative Energy Generation</b>	<b>2+2 credits</b>

**Course Description:** The students will study various forms of alternative energy, including such areas hydropower, combustion turbines, fuel cells, biomass, geothermal, nuclear and energy recycling. The student will be expected to develop an understanding of their sources and applications. A report will be developed by the student utilizing information from course to prepare and defend, a report on the use of a fuel for future usage and replacement of a oil or coal based energy sources.

**Course Outcomes and Assessment Plan:**

**Student Learning Outcomes**

---

Students satisfactorily completing this course will achieve/complete/demonstrate

1. The student will define various types of alternative energy sources in research reports.
2. The student will identify and recognize an alternate energy source that can applied to a particular applications
3. The student will demonstrate the ability to justify an alternative source of energy for a specific problem.
4. The student will compare alternative energy sources and defend their recommendations for an application.

**Course Assessments**

---

1. The students will know types of alternate energy sources.
2. The students will understand the pro and cons of alternate energy sources.
3. The students will solve problems, using alternate energy sources.
4. The students will demonstrate teamwork in applying alternative energy sources to a practical problem and defend their conclusions.

**Course Outline including Time Allocation:**

NO.	UNIT TOPIC DESCRIPTION SUMMARY	LECTURE HOURS	LAB HOURS
I.	Introduction	2	
II.	Hydropower	2	2
III.	Combustion Turbines	3	3
IV.	Active Solar Thermal Systems	2	2

V.	Wind & Photovoltaic Systems	2	2
VI.	Fuel Cells	4	4
VII.	Combined Heat & Power Systems	2	2
VIII.	Hybrid generation systems	4	4
IX.	Biomass Systems	3	3
X.	Geothermal Energy Systems	1	1
XI.	Ocean Systems	2	2
XII.	Nuclear Systems	1	3
XIII	Energy Recycling	2	2
	Total Hours	30	30

## NEW COURSE INFORMATION FORM

### Course Identification:

<b>Prefix:</b>	<b>Number</b>	<b>Title</b>
ENGY	433	Energy Generation and Distribution Systems, 3+2 credits

### Course Description:

This course addresses the generation of electrical energy using conventional generators, photovoltaic arrays and wind turbines. Conversion of energy from direct current to alternating current, along with connecting different electrical systems to the electrical grid, using single and three-phase connections, will be covered. Basic efficiency, load control and the flow from different sources will be investigated

### Course Outcomes and Assessment Plan:

Students satisfactorily completing this course will achieve/complete/demonstrate...:

1. They have an understanding of the Generation of Electrical Energy and Power
2. They have an understanding of how electrical energy is used and transmitted in different forms
3. They have an understanding of distribution and storage potential for electrical energy.
4. They have an comprehension of controls used in electrical distribution systems and a "Smart Grid".
5. They have knowledge of the systems used for metering and measurement of electrical energy and system protections.

### Course Outline including Time Allocation:

NO.	UNIT TOPIC DESCRIPTION SUMMARY	LECTURE HOURS	LAB HOURS
I.	Introduction	1	
II.	Voltage, current and Efficiency	1	
III.	Energy and Power	1	
IV.	Resistive, Inductive and Capacitive Loads	2	2
V.	Single Phase Electric Power Generation	2	2
VI.	Three Phase Power Generation	2	
VII.	Single Phase AC Motors	1	

VIII.	Shaded-Pole Synchronous Motors	1	
IX.	Wind Turbines	3	2
X.	Photovoltaic Arrays	3	2
XI	Distribution and Domestic Power Supply	2	
XII	Over-current Protection	1	
XIII	Inverters and Battery Based AC	1	2
XIV	Batteries and Storage	2	2
XV	Switched Mode Power Supply	1	
XVI	Connecting System to Grid	3	2
XVII	Passive Control	2	2
XVIII	Active (Electronic) Control	3	2
XIX	Computerized Control	3	2
XX	"Smart" Grid System	3	4
XXI	Energy Meters	1	2
XXII	Mechanical Meters	1	2
XXIII	Electronic Meters	3	2
XXIV	System Protection	2	
	Total	45	30

**FORM F  
Create New Course**

**Course: ENGY 323**

**Energy, Cradle to Grave**

**Rev. 04/11/09**

**I. ACTION TO BE TAKEN: CREATE A NEW COURSE**

Notes

Prerequisite for ENGY 420, ENGY 430  
Term Effective: 201001

**II. PROPOSED FOR NEW COURSE:**

a. Course Prefix

**ENGY**

b. Number

**323**

c. Enter Contact Hours per week in boxes.

Lecture **3** LAB 0 Independent Study – Check (x)

Practicum:  Seminar:

d. Course Title: **Energy, Cradle to Grave**

e. College Code: **TE** f. Department Code: **ENGY**

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**

The student will study energy from its source, to its final usage and will understand the energy and carbon footprint of creating energy, transporting it converting it, using it. Losses and costs of energy production and usage will be studied. The course reviews past, present and future trends in global energy consumption, environmental concerns of energy generation, distribution and consumption, as well as a classification and comparison of energy sources.

p. Term(s) Offered: **01** (See instructions for listing.) q. Max. Section Enrollment: **30**

r. Prerequisites/Co-requisites/Restrictions: **MECH 330**.

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 \_\_\_

Create New Course

FORM F

Course: Energy Generation from Wind and Solar

Rev. 4/30/09

I. ACTION TO BE TAKEN: CREATE A NEW COURSE

Notes: Course is not a prerequisite for any course
Term Effective: 201108

II. PROPOSED FOR NEW COURSE:

a. Course Prefix: ENGY b. Number: 420 c. Enter Contact Hours per week in boxes: 4
Lecture 4 LAB Independent Study - Check (x)
Practicum: Seminar:

d. Course Title: Wind & Solar Energy Generation

e. College Code: TE f. School Code: ENGY

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

g. Type: Variable Fixed h. Minimum Credit Hours 4 i. Maximum Credit Hours 4

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 None.

o. CATALOG DESCRIPTION:

The course introduces students to from solar and wind energy. Students will study site conditions requirements and potentials for generation based on several proposed projects at the university for electrical and heat generation from solar and wind power. Students will be study the strength and weaknesses of energy generation, in addition to mounting, maintenance and regulations regarding wind and solar equipment.

p. Term(s) Offered: 01 (See instructions for listing.) q. Max. Section Enrollment: 30

r. Prerequisites/Co-requisites/Restrictions: ENGY 323

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 F**  
**Create New Course**

**Course: ENGY 430 – Alternative Energy Generation**

**Rev. 07/23/07**

**I. ACTION TO BE TAKEN: CREATE A NEW COURSE**

Notes: Course is not a prerequisite for any course

Term Effective: 201108

**II. PROPOSED FOR NEW COURSE:**

a. Course Prefix: **ENGY**      b. Number: 430      c. Enter Contact Hours per week in boxes 4

**Lecture**2      **LAB** 2      **Independent Study – Check (x)**   
Practicum:       Seminar:

d. Course Title: e. College Code: TE      f. Department Code: ENGY

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

g. Type:  Variable     Fixed      h. Minimum Credit Hours 4      i. Maximum Credit Hours 4

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       None.

**o. CATALOG DESCRIPTION –**

The students will study various forms of alternative energy, including such areas hydropower, combustion turbines, fuel cells, biomass, geothermal, nuclear and energy recycling. The student will be expected to develop an understanding of their sources and applications. A report will be developed by the student utilizing information from course to prepare and defend, a report on the use of a fuel for future usage and replacement of a oil or coal based energy sources.

p. Term(s) Offered: 08 (See instructions for listing.)      q. Max. Section Enrollment: 30

r. Prerequisites/Co-requisites/Restrictions: ENGY 323

**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 \_\_

**CREATE NEW COURSE**  
Course Data Entry Form

**FORM F**

**Create New Course**  
Rev. 04/30/09

**I. ACTION TO BE TAKEN: CREATE A NEW COURSE**

Term Effective (6 digit code only): 201008

**II. PROPOSED FOR NEW COURSE:**

a. Course Prefix ESE ENGY      b. Number 433      c. Enter Contact Hours per week in boxes.  
Lecture 3      LAB 2      Independent Study – Check (x)   
Practicum:       Seminar:

d. Course Title: Energy Generation and Distribution Systems

e. College Code: TE      f. Department Code: ENGY

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

g. Type:  Variable     Fixed      h. Minimum Credit Hours 4      i. Maximum Credit Hours 4

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 –**

This course addresses the generation of electrical energy using conventional generators, photovoltaic arrays and wind turbines. Conversion of energy from direct current to alternating current, along with connecting different electrical systems to the electrical grid, using single and three-phase connections, will be covered. Basic efficiency, load control and the flow from different sources will be investigated.

p. Term(s) Offered: Spring

q. Max. Section Enrollment: 20

r. Prerequisites/Co-requisites/Restrictions: EEET 313.

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 \_\_\_

**Ferris State University  
College of Technology**

---

**Course Outline**

Last Revision Date:	
Curriculum Committee Chair:	

---

**Course: ENGY 323                      Energy, Cradle to Grave**

**Credits:**                                      3 Semester Hours

**Contacts:**                                    3 Lecture per Week

**Course Description:**                    The student will study energy from its source, to its final usage. The student will understand the energy and carbon footprint of creating energy, transporting it converting it, using it and its final form. Losses and costs of energy production and usage will be studied. It also provides the essential cognitive and practical tools to allow individuals to assess changing energy consumption patterns. The course reviews past, present and future trends in global energy consumption, environmental concerns of energy generation, distribution and consumption, as well as a classification and comparison of energy sources.

---

**Course Prerequisites:**                MECH 330

**Student Learning Outcomes**

This course provides an overview of the United States energy industry from a global perspective. It also provides the essential cognitive and practical tools to allow individuals to assess changing energy consumption patterns. The course reviews past, present and future trends in global energy consumption, environmental concerns of energy generation, distribution and consumption, as well as a classification and comparison of energy sources. The course concludes with an Team study of an energy pathway and evaluation of energy consumed, as well as carbon emissions of various sources.

Attached to this course is a "Town Hall" of weekly informal presentations and dialog between students, industry professionals and stakeholders. These meetings are designed to raise awareness on energy, built environment and SD issues, enhance critical debate skills and provide networking opportunities

**Course Outcomes and Assessment Plan:**

- a. The Student will have knowledge of what energy is in its useful forms.
  - i. The student will be able to describe sources of energy.
  - ii. The student will be able to recognize a source of energy.
- b. The student will demonstrate knowledge of various sources of energy.

**Ferris State University**  
**College of Technology**

**Course Outline**

- i. The student will express the energy content of a source.
  - ii. The student will be able to recognize what energy is required to develop a source into a useful form.
- c. The student will demonstrate the ability to analyze the energy input costs and losses to bring an energy source from its initial state to final form.
  - i. The student will know of providers of information to formulate energy content and losses of various sources of energy.
- d. The student will demonstrate the ability to evaluate energy sources as they affect the environment, social and economic issues.
  - i. The student will be able to compare energy sources in the relation to environmental issues.
  - ii. The student will recognize the social impact of a source of energy.
  - iii. The student will be able to analyze the economic costs of energy sources.
- e. The student will work effectively in teams.
  - i. Student will have the ability to work in teams to analyze energy flow from a source to final usage.
  - ii. Students will defend the team's decision of its evaluation of an energy flow

**Instructional Unit Topic Descriptions and Time Allocations**

O.	UNIT TOPIC DESCRIPTION SUMMARY	LECTURE HOURS
I.	Introduction	1
II.	Energy – what is it, where does it go?	4
III.	Energy sources currently used in commercial, industrial and residential facilities.	4
IV.	Tracking of energy through its production, transportation and conversion to a useful product	4
V.	Study of energy consumed to produce a source of energy. i.e. electric.	10
VI.	Study how energy can be accounted for using a common denominator, such as BTU'ss	9
VII.	Team studies of an energy source through its lifetime, from cradle to grave.	11
VIII.	Final Examination	2

**Ferris State University  
College of Technology**

**Course Outline**

	Total Hours	45

**Learning Outcomes for Each Instructional Unit**

Upon Completion of each instructional unit, the learner will be able to satisfactorily:

I.	Introduction A. Discuss the course objectives and Syllabus B. Explain the Assignment Procedures.
II.	Energy, what is it, where does it go A. Study traditional energy sources and trends B. Understand how energy is consumed. C. Describe where all energy goes and its effect on the environment.
III.	Energy sources currently used in commercial, industrial and residential facilities A. Students understand how energy is used in commercial, industrial and residential facilities
IV.	Tracking of energy through its production, transportation and conversion to a useful product A. Understand how energy is developed from its basic source to it final useful utility.
V.	Study of energy consumed to produce a source A. Student will analyze losses occurring during production, transportation and conversion
VI.	Study how energy can be accounted for and the associated costs for various forms in terms of BTU's A. Be able to apply a BTU Accounting system to the study of a energy source, from cradle to grave.
VII.	Team studies of an energy source through its lifetime, from cradle to grave A. Work in a team to evaluate a source of energy, its environmental efficiency from it's initial source to final usage..
VIII.	Final Examination

Course Outline

Last Revision Date:	4/28/2009
Department Curriculum Committee Chair:	Thomas Hollen, P.E.

**ENGY 420**

**Energy Generation from Wind and Solar**

**Credits:** 4 Semester Hours

**Contacts:** 4 hours of Lecture

**Course Description:** The course introduces students to from solar and wind sources. Students will study site conditions requirements and potentials for generation based on several proposed projects at the university for electrical and heat generation from solar and wind power. Students will be study the strength and weaknesses of energy generation, in addition to mounting, maintenance and regulations regarding wind and solar equipment. They study the role of inverters and charge controllers in providing a safe, stable, long-lived system that is also compatible to other electrical devices and the grid.

**Course Prerequisites:**

**Required Textbooks:** Wind Energy Systems, the Book, Dr. Gary Johnson, Internet PDF available, January 29, 2004. (no cost)  
"Wind and Solar Power Systems", Mukund R. Patel, Taylor & Francis Group (CRC), 2<sup>nd</sup> Edition, 2006, ISBN: 978-0-8493-1570-1

**Required Materials:** Internet and published research.

**Student Learning Outcomes**

Students satisfactorily completing this course will achieve/complete/demonstrate...:

1. The student will have an understanding of wind and solar energy conversion systems
2. The student will have an understanding of the requirements of effective wind and solar energy systems.
3. Student will understand wind and solar characteristics and measurements.
4. The student will understand the controls required of wind and solar energy system
5. Students will have an appreciation of the economics of wind and solar power

**Instructional Unit Topic Descriptions and Time Allocations**

NO.	UNIT TOPIC DESCRIPTION SUMMARY	LECTURE HOURS	LAB HOURS
-----	--------------------------------	---------------	-----------

Ferris State University  
College of Technology

Course Outline

I.	Introduction	2	
II.	Wind Speed, Energy and placement	8	
III.	Electrical Generators	6	
IV.	IO Foundation	4	
V.	Power, Electronics	6	
VI.	Plant Economy	4	
VII.	Sensitivity Analysis	4	
VIII.	Hybrid Economics	6	
IX.	Solar- Photovoltaic's	8	
X.	Solar- Heating	4	
XI	Solar – Hybrids	4	
XII	Effects of Utility Restructuring	4	
	Total Hours	60	

**Learning Outcomes for Each Instructional Unit**

Upon Completion of each instructional unit, the learner will be able to satisfactorily:

I.	Topic: Introduction A. Student will be able to identify the problems on solutions of wind and solar power generation
II.	Topic: Wind Speed, Energy and placement A. The student will identify the sites and locations of wind and solar power B. The student will evaluate sites for practicality of wind or solar power. C. the students will know the requirements of siting wind and solar power generation.
III.	Topic: Electrical Generators A. The student will understand single phase generation using small generators. B. The student will understand 3 phase generation and its application.
IV.	Topic: IO Foundation A. The student will be familiar with basics of electrical foundations need to study wind and solar power generation
V.	Topic: Power, Electronics A. Student will know the equipment for conditioning electricity from wind and solar so that it is compatible with the grid.
VI.	Topic: Plant Economy A. The student will be able to evaluate generation economics from partical source and location.
VII.	Topic: Sensitivity Analysis A. Student will be able evaluate expected values, solar irradiation and profitability from a site.
VIII.	Topic: Hybrid Economics A. Students will know the economics of hybrid systems - wind/solar, etc. B. Students will be able evaluate the competiveness of various systems.
IX	Topic: Solar- Photovoltaics A. Students will know the types of photovoltaic arrays that are available. B. Students will evaluate different products, locations, etc. for photovoltaic's.
X	Topic: Solar- Heating A. Students will study the potential for solar heating and storage B. Students Develop knowledge of the practical applications of solar heating.
XI	Topic: Solar – Hybrids A. The student will know the various types of hybrid systems that can be configured.
	Topic: Effects of Utility Restructuring A. The student will know the regulations and laws that govern the utilities regarding

Ferris State University  
College of Technology

Course Outline

	alternative energy generation
IX.	Evaluation: A. Students will be able to present a report on the siting, economics, and sustainability of a particular generation location.
	Final Examination -

---

Course Outline

Last Revision Date:	2/19/2010
Department Curriculum Committee Chair:	Thomas W. Hollen, P.E.

---

**Course: ENGY 430**

**Alternative Energy Generation**

---

**Credits:** 4 semester Hours

**Contacts:** 2 Lecture, 2 Lab. Hours per Week

**Course Description:** The students will study various forms of alternative energy, including such areas hydropower, combustion turbines, fuel cells, biomass, geothermal, nuclear, etc. The student will be expected to develop an understanding of their sources and applications. A report will be developed by the student utilizing information from course to prepare and defend a report on the use of a fuel for future usage and replacement of oil or coal based energy source. Course will also cover Energy Recycling.

**Course Prerequisites:** ENGY 323

**Required Textbooks:** Alternative Energy Systems and Applications, B.K. Hodges, Wiley Publishing, ISBN 978-0-470-14250-9

**Required Materials:** Internet and published research

---

**Student Learning Outcomes**

Students satisfactorily completing this course will achieve/complete/demonstrate

1. The student will define various types of alternative energy sources in research reports.
2. The student will identify and recognize an alternate energy source that can applied to a particular applications
3. The student will demonstrate the ability to justify an alternative source of energy for a specific problem.
4. The student will compare alternative energy sources and defend their recommendations for an application.

---

**Course Assessments**

1. The students will know types of alternate energy sources.
2. The students will understand the pro and cons of alternate energy sources.
3. The students will solve problems, using alternate energy sources.
4. The students will demonstrate teamwork in applying alternative energy sources to a practical problem and defend their conclusions.

Course Outline

**Instructional Unit Topic Descriptions and Time Allocations**

NO.	UNIT TOPIC DESCRIPTION SUMMARY	LECTURE HOURS	LAB HOURS
I.	Introduction	2	
II.	Hydropower	2	2
III.	Combustion Turbines	3	3
IV.	Active Solar Thermal Systems	2	2
V.	Wind & Photovoltaic Systems	2	2
VI.	Fuel Cells	4	4
VII.	Combined Heat & Power Systems	2	2
VIII.	Biomass Systems	4	4
IX.	Geothermal Energy Systems	3	3
X.	Ocean Systems	1	1
XI.	Nuclear Systems	2	2
XII.	Energy Recycling	1	3
	Review	2	2
	Total Hours	30	30

**Learning Outcomes for Each Instructional Unit**

I.	<p>Topic</p> <p>A. Student will understand the historical use of energy</p> <p>B. Student will be able to define the current state of energy usage.</p>
II.	<p>Topic</p> <p>A. The student will understand the use and requirements of Hydropower</p> <p>B. The student will be able to discuss turbo machinery.</p>

Ferris State University  
College of Technology

Course Outline

III.	<ul style="list-style-type: none"> <li>A. Topic</li> <li>B. The student will understand the use and requirements of combustion turbines</li> <li>C. The student will be able to discuss combustion turbines.</li> </ul>
IV.	<ul style="list-style-type: none"> <li>Topic</li> <li>A. The student will understand the use and requirements of Active Solar Thermal Systems</li> <li>B. The student will be able to discuss Active Solar Thermal Systems and their applications.</li> </ul>
V.	<ul style="list-style-type: none"> <li>Topic</li> <li>A. The student will understand the use and requirements of Wind &amp; Photovoltaic Systems</li> <li>B. The student will be able to discuss Wind &amp; Photovoltaic Systems and their applications</li> </ul>
VI.	<ul style="list-style-type: none"> <li>Topic</li> <li>A. The student will understand the use and requirements of Fuel Cells</li> <li>B. The student will able to discuss Fuel Cells and their applications</li> </ul>
VII.	<ul style="list-style-type: none"> <li>Topic</li> <li>A. The student will understand the use and requirements of Combined Heat &amp; Power Systems</li> <li>B. The student will able to discuss Combined Heat &amp; Power Systems. and their applications</li> </ul>
VIII.	<ul style="list-style-type: none"> <li>Topic</li> <li>A. The student will understand the use and requirements of Biomass Systems</li> <li>B. The student will able to discuss Biomass Systems and their applications</li> </ul>
IX.	<ul style="list-style-type: none"> <li>Topic</li> <li>A. The student will understand the use and requirements of Geothermal Energy Systems</li> <li>B. The student will able to discuss Geothermal Energy Systems and their applications</li> </ul>
X	<ul style="list-style-type: none"> <li>Topic</li> <li>A. The student will understand the use and requirements of Ocean Systems</li> <li>B. The student will able to discuss Ocean Systems and their applications</li> </ul>
XI	<ul style="list-style-type: none"> <li>Topic</li> <li>A. The student will understand the use and requirements of Nuclear Systems</li> <li>B. The student will able to discuss Nuclear Systems and their applications</li> </ul>
XII	<ul style="list-style-type: none"> <li>Topic</li> <li>The student will understand the use and requirements of Energy Recycling</li> <li>The student will able to discuss Energy Recycling and their applications</li> </ul>

**Minimum Required Student Laboratory Activities <sup>1</sup>**

NO.	UNIT TOPIC DESCRIPTION SUMMARY
I.	Introduction
II.	Hydropower Student will visit Hydro power plant
III.	Combustion Turbines Student will operate combustion turbine trainer system
IV.	Active Solar Thermal Systems Students will observe systems in the field and their operation
V.	Wind & Photovoltaic Systems Students will observe systems in the field and their operation
VI.	Fuel Cells Student will observe operation and usage of fuel cells
VII.	Combined Heat & Power Systems Students will observe the operations of the these systems
VIII.	Biomass Systems Students will develop a working biomass system
IX.	Geothermal Energy Systems Students will observe existing system in operation
X.	Ocean Systems Students will research location, usage and potential of ocean systems
XI.	Nuclear Systems Students will visit a nuclear power plant and observe operation of p[lant
XII.	Energy Recycling Students will design and implement a simple recycling system.
Note	Many labs will be field trips and tours of existing operations and energy systems.

---

Course Outline

Last Revision Date:	4/30/09
Department Curriculum Committee Chair:	

---

**Course: ENGY 433**

**Energy Generation and Distribution Systems**

---

**Credits:** 4 Hours

**Contacts:** 3 Hours of Lecture, 2 Hours of Lab. per week

**Course Description:** This course addresses the generation of electrical energy using conventional generators, photovoltaic arrays and wind turbines. Conversion of energy from direct current to alternating current, along with connecting different electrical systems to the electrical grid, using single and three-phase connections, will be covered. Basic efficiency, smart grid, net metering, load control and flow from different sources will be investigated.

**Course Prerequisites:** EEET 313

**Required Textbooks:**

**Required Materials:**

---

### Student Learning Outcomes

---

Students satisfactorily completing this course will achieve/complete/demonstrate:

1. The student will have an understanding of the generation of electrical energy from generators, photovoltaic cells and wind.
2. The student will have an understanding of how electrical energy is used and transmitted in different forms
3. The student will have an understanding of distribution and storage potential for electrical energy.
4. The student will have a comprehension of controls used in electrical distribution systems and a "Smart Grid".
5. The student will have knowledge of the systems used for metering and measurement of electrical energy and system protections.

Course Outline

**Instructional Unit Topic Descriptions and Time Allocations**

NO.	UNIT TOPIC DESCRIPTION SUMMARY	LECTURE HOURS	LAB HOURS
I.	Introduction	1	
II.	Voltage, current and Efficiency	1	
III.	Energy and Power	1	
IV.	Resistive, Inductive and Capacitive Loads	2	2
V.	Single Phase Electric Power Generation	2	2
VI.	Three Phase Power Generation	2	
VII.	Single Phase AC Motors	1	
VIII.	Shaded-Pole Synchronous Motors	1	
IX.	Wind Turbines	3	2
X.	Photovoltaic Arrays	3	2
XI.	Distribution and Domestic Power Supply	2	
XII.	Over-current Protection	1	
XIII.	Inverters and Battery Based AC	1	2
XIV.	Batteries and Storage	2	2
XV.	Switched Mode Power Supply	1	
XVI.	Connecting System to Grid	3	2
XVII.	Passive Control	2	2
XVIII.	Active (Electronic) Control	3	2
XIX.	Computerized Control	3	2
XX.	"Smart" Grid System	3	4
XXI.	Energy Meters	1	2
XXII.	Mechanical Meters	1	2
XXIII.	Electronic Meters	3	2
XXIV.	System Protection	2	
	Total	45	30

## Learning Outcomes for Each Instructional Unit

Upon Completion of each instructional unit, the learner will be able to satisfactorily:

I.	Voltage, Current, Efficiency, Energy and Loads A. Calculate voltage, current and resistance using Ohms law. B. Calculate power and efficiency of a loaded system.
II.	Power Generation : Single Phase and 3 Phase A. Understand single phase generation using small generators. B. Understand 3 phase generation and its application.
III.	Wind Turbines and Photovoltaic Arrays A. Know the components of wind turbines and photovoltaic arrays. B. Know how to connect the turbines and arrays to existing distribution lines.
IV.	Distribution and Domestic Power Supply A. Understand how power is generated by coal and nuclear units. B. Understand how power is distributed nationwide.
V.	Batteries and Energy Storage A. Be able to calculate energy storage in lead acid and lithium ion batteries. B. Be able to calculate energy storage in hydrogen.
VI.	The Electrical Grid A. Understand the concept of load flow. B. Be able to perform basic load flow calculations.
VII.	Computer Control and Smart Grid Technologies A. Understand how computers control electrical flow in the grid. B. Apply sensors to detect conditions in a grid.
VIII.	Metering A. Apply meters to measure energy usage. B. Know how to wire meters to allow feeding the grid with user generated energy..
IX.	Evaluation
	Final Examination -

### Minimum Required Student Laboratory Activities

I.	System Loads A. Measure load resistance from voltage and current measurements. B. Measure load impedance from phase angle.
II.	Power Calculations A. Compute power from voltage and current measurements. B. Compute real, reactive and apparent from circuit measurements.
III.	Electrical Generation A. Measure voltage and current from generator. B. Determine loading effects on generator.
IV.	Wind and Solar Generation A. Measure output of wind generator for various wind speeds. B. Measure output of solar array for various light intensities.
V.	Energy Storage A. Measure energy storage of various batteries. B. Measure energy stored in hydrogen.
VI.	Grid Operation A. Measure load flow in simulated grid. B. Observe mismatch of energy usage to energy generation.
VII.	Grid Control A. Develop Manual switches to maintain proper load flow. B. Develop computer control switches to maintain load flow.
VIII.	Smart Grid A. Connect sensors to monitor energy flow at different points in grid. B. Develop program to use sensors for computer control of switching.
IX.	Metering A. Measure power consumption for typical household. B. Connect a meter for back feeding grid.

**Course: ESE 323**

**Energy Cradle to Grave**

**Credits:** 3 Semester Hours

**Contacts:** 3 Lecture per Week

**Course Description:** The student will study energy from its source, to its final usage. The student will understand the energy and carbon footprint of creating energy, transporting it converting it, using it and its final form. Losses and costs of energy production and usage will be studied. It also provides the essential cognitive and practical tools to allow individuals to assess changing energy consumption patterns. The course reviews past, present and future trends in global energy consumption, environmental concerns of energy generation, distribution and consumption, as well as a classification and comparison of energy sources,

**Course Prerequisites:** MECH 330

**Course Outline:** The official course outline for this course can be located ...

**Required Textbooks:** Energy Systems Engineering, Francis M. Vanek & Louis D. Albright, McGraw Hill, 2008, ISBN: 978-0-07-149593-6

**Course Web Site:** Reference materials, mandatory supplemental reading, assignments, instructor messages and other information are provided through the Ferris Connect site for this course. Daily reference is mandatory.

**Required Materials:**

**Reference Materials:** Internet and published documents.

*Other suggested or supplemental materials*

**Faculty: Prof..**

Office:

Phone: (231) 591 -

Alt. Phone:

Email: @ferris.edu

Alt. Email:

Office Hours:

Day	Times	Day	Times
Mondays	9:00am - 10:00am	Wednesday	11:00am - 12:00pm
Thursday	1:00pm - 2:00pm	Friday	4:00pm - 5:00pm

## Student Learning Outcomes

Students satisfactorily completing this course will achieve proficiency in :

1. A well-defined understanding of what energy is
2. Sources of Energy and associated costs and energy required to make it useful.
3. Understanding of how energy is used and losses associated with these usages.
4. Tracking the BTU content of energy streams from initial production to final usage using “BTU Accounting”.
5. An understanding of the “Carbon Footprints” of various energy streams

## Course Assessments

EVALUATION ACTIVITIES	POINTS
Tests (4)	400
Reports	50
A. A study of energy and what is it and where does it goes.	
B. Energy sources currently used in commercial, industrial and residential facilities.	50
C. Tracking of energy through its production, transportation and conversion to a useful product.	50
D. Study of energy consumed to produce a source	50
E. Study of losses occurring during production, transportation and conversion	50
F. Study how energy can be accounted for and the associated costs for various forms in terms of BTU's	50
G. Team studies of an energy source through its lifetime, from cradle to grave.	100
Final Examination	100
<b>TOTAL POINTS</b>	<b>900</b>

**Course Policies**

<b>Attendance:</b>	Attendance will be taken at the beginning of each class period. DEDUCT 5 POINTS FOR EACH ABSENCE or 2 late arrivals/leaving early.
<b>Assignments:</b>	All assignments must be submitted prior to the beginning of class in the designated location. Late or improperly prepared work will not be accepted.
<b>Behavior:</b>	Disruptive behavior, vulgar language, sexual innuendo and/or harassment, safety violations, horseplay, etc. will not be tolerated in the classroom or laboratory. In the lab, students are not permitted to wander about the lab or compare their results with others. Work only with your partner. No eating or drinking is permitted in classrooms or laboratories per EEET department policies. All cell phones must be turned off during lecture and lab periods.
<b>Exams and quizzes:</b>	Exams will be given at times listed in the class scheduled. All exams are cumulative. The final exam will be given at a time to be determined by the University during finals week.  Quizzes may be given at any time during the course as required by the instructor. No advanced notice will be given for quizzes and all quizzes will be given during a regularly scheduled lecture period.
<b>Ferris Connect:</b>	Ferris Connect site must be referenced daily by students for access to instructor messages and course information. Exams will be administered through Ferris Connect.
<b>Grading Percentage:</b> (Earned Points/Total Points) * 100	In accordance with established policy in the Ferris State University catalog and student handbook. A = 92 – 100, A- = 90 – 91, B+ = 88 – 89, B = 82 – 87, B- = 80 – 81 C+ = 78 – 79, C = 72 – 77, C- = 70 – 71 D+ = 68 – 69, D = 62 – 67, D- = 60 – 61 F = 0 – 59
<b>Integrity:</b>	All of your assignments must be developed independently. Cheating of any type will result in loss of credit or more serious consequences.
<b>Student Responsibilities:</b>	Assistance in this course is available to help you with academic and other difficulties you may be experiencing. It is your responsibility to seek help. <ol style="list-style-type: none"> <li>1. Office hours – I will be happy to work with you during regularly scheduled office hours.</li> <li>2. Pre-scheduled assistance outside of normal office hours (as my schedule permits).</li> <li>3. Meet with your Academic advisor.</li> <li>4. Meet with an educational counselor.</li> <li>5. The ACADEMIC SUPPORT SERVICES CENTER offers free tutoring and assistance for test anxiety, study skills, writing skills, exam preparation, content reading, personal growth, and classroom skills. The Center is located in Room 1017 of the Arts and Sciences Commons Buildings and they can be reached at 591-3543.</li> </ol>

To be completed by instructor

**Course Schedule**

Date	Lecture/Lab Topic	Preparation	Assignment
Week 1			
Week 2	<b>*LABOR DAY*</b>		
Week 3			
Week 4			
Week 5			
Week 6			
Week 7			
Week 8			
Week 9			
Week 10			
Week 11			
Week 12			
Week 13			
Week 14			
Week 15			
Week 16	Final Exam		
	Final Exam		

**Course: ENGY 420 – Energy Generation from Wind and Solar**

---

**Credits:** 4 Semester Hours

**Contacts:** 4 Lecture per Week

**Course Description:** The course introduces students to from solar and wind sources. Students will study site conditions requirements and potentials for generation based on several proposed projects at the university for electrical and heat generation from solar and wind power. Students will be study the strength and weaknesses of energy generation, in addition to mounting, maintenance and regulations regarding wind and solar equipment. They study the role of inverters and charge controllers in providing a safe, stable, long-lived system that is also compatible to other electrical devices and the grid.

**Course Prerequisites:** ENGY 323

**Course Outline:** The official course outline for this course can be located ... (i.e. on the Ferris Connect site, another link, as an attachment, etc.)

---

**Required Textbooks:** Wind Energy Systems, the Book, Dr. Gary Johnson, Internet PDF available, January 29, 2004. (Free).

**Course Web Site:** (example: Reference materials, mandatory supplemental reading, assignments, instructor messages and other information are provided through the Ferris Connect site for this course. Daily reference is mandatory.)

**Required Materials:** Wind Energy Systems, the Book, Dr. Gary Johnson, Internet PDF available, January 29, 2004. (Free).

**Reference Materials:**

*Other suggested or supplemental materials* Internet and Published Materials

---

**Faculty: Prof.**

Office: Building – Room Number

Phone: (231) 591 – xxxx

Alt. Phone:

Email: \_\_\_\_\_@ferris.edu

Alt. Email:

Office Hours:

Day	Times	Day	Times

## Student Learning Outcomes

Students satisfactorily completing this course will achieve/complete/demonstrate...:

1. The student will have an understanding of wind and solar energy conversion systems
2. The student will have an understanding of the requirements of effective wind and solar energy systems.
3. Student will understand wind and solar characteristics and measurements.
4. The student will understand the controls required of wind and solar energy systems.
5. Students will have an appreciation of the economics of wind and solar power

## Course Assessments

## Course Policies

<b>Attendance:</b>	Attendance will be taken at the beginning of each class period. DEDUCT 5 POINTS FOR EACH ABSENCE or 2 late arrivals/leaving early.
<b>Assignments:</b>	All assignments must be submitted prior to the beginning of class in the designated location. Late or improperly prepared work will not be accepted.
<b>Behavior:</b>	Disruptive behavior, vulgar language, sexual innuendo and/or harassment, safety violations, horseplay, etc. will not be tolerated in the classroom or laboratory. In the lab, students are not permitted to wander about the lab or compare their results with others. Work only with your partner. No eating or drinking is permitted in classrooms or laboratories per EEET department policies. All cell phones must be turned off during lecture and lab periods.
<b>Exams and quizzes:</b>	Exams will be given at times listed in the class scheduled. All exams are cumulative. The final exam will be given at a time to be determined by the University during finals week.  Quizzes may be given at any time during the course as required by the instructor. No advanced notice will be given for quizzes and all quizzes will be given during a regularly scheduled lecture period.
<b>Ferris Connect:</b>	Ferris Connect site must be referenced daily by students for access to instructor messages and course information. Exams will be administered through

Ferris State University  
College of Technology

Syllabus – Semester Year

	<b>Ferris Connect.</b>
<b>Grading Percentage:</b> (Earned Points/Total Points) * 100	In accordance with established policy in the Ferris State University catalog and student handbook. A = 92 – 100, A- = 90 – 91, B+ = 88 – 89, B = 82 – 87, B- = 80 – 81 C+ = 78 – 79, C = 72 – 77, C- = 70 – 71 D+ = 68 – 69, D = 62 – 67, D- = 60 – 61 F = 0 – 59
<b>Integrity:</b>	All of your assignments must be developed independently. Cheating of any type will result in loss of credit or more serious consequences.
<b>Student Responsibilities:</b>	Assistance in this course is available to help you with academic and other difficulties you may be experiencing. It is your responsibility to seek help. <ol style="list-style-type: none"> <li>1. Office hours – I will be happy to work with you during regularly scheduled office hours.</li> <li>2. Pre-scheduled assistance outside of normal office hours (as my schedule permits).</li> <li>3. Meet with your Academic advisor.</li> <li>4. Meet with an educational counselor. College Educational Counselor – Vordyn Nelson x 2890, JHN 200</li> <li>5. The ACADEMIC SUPPORT SERVICES CENTER offers free tutoring and assistance for test anxiety, study skills, writing skills, exam preparation, content reading, personal growth, and classroom skills. The Center is located in Room 1017 of the Arts and Sciences Commons Buildings and they can be reached at 591-3543.</li> </ol>

**Course Schedule**

NO.	UNIT TOPIC DESCRIPTION SUMMARY	LECTURE HOURS	LAB HOURS
I.	Introduction	2	
II.	Wind Speed, Energy and placement	8	
III.	Electrical Generators	5	
IV.	IO Foundation	4	
V.	Power, Electronics	6	
VI.	Plant Economy	8	

Ferris State University  
College of Technology

---

Syllabus – Semester Year

VII.	Sensitivity Analysis	4	
VIII.	Hybrid Economics	5	
IX.	Solar	4	
X.	Solar	5	
XI	Solar	5	
XII	Effects of Utility Restructuring	4	
	Total Hours	60	

---

**Course: ENGY 430 – Alternative Energy Generation**

---

**Credits:** 4 semester hours

**Contacts:** 2 Lecture, 2Lab Hours per Week

**Course Description:** The students will study various forms of alternative energy, including such areas hydropower, combustion turbines, fuel cells, biomass, geothermal, nuclear, etc. The student will be expected to develop an understanding of their sources and applications. A report will be developed by the student utilizing information from course to prepare and defend, a report on the use of a fuel for future usage and replacement of a oil or coal based energy source. Course will also cover Energy Recycling.

**Course Prerequisites:** ENGY 323

**Course Outline:** See attached Appendix

---

**Required Textbooks:** Alternative Energy Systems, B.K. Hodges, Wiley Publishing, ISBN 978-0-470-14250-9

**Course Web Site:** (example: Reference materials, mandatory supplemental reading, assignments, instructor messages and other information are provided through the Ferris Connect site for this course. Daily reference is mandatory.)

**Required Materials:**

**Reference Materials:** Internet and publication research

---

**Faculty: Prof.**

---

**Office:** Building – Room Number

**Phone:** (231) 591 – xxxx

**Alt. Phone:**

**Email:** \_\_\_\_\_@ferris.edu

**Alt. Email:**

**Office Hours:**

Day	Times	Day	Times

## Student Learning Outcomes

Students satisfactorily completing this course will achieve/complete/demonstrate

1. The student will define various types of alternative energy sources in research reports.
2. The student will identify and recognize an alternate energy source that can applied to a particular applications
3. The student will demonstrate the ability to justify an alternative source of energy for a specific problem.
4. The student will compare alternative energy sources and defend their recommendations for an application.

## Course Assessments

1. The students will know types of alternate energy sources.
2. The students will understand the pro and cons of alternate energy sources.
3. The students will solve problems, using alternate energy sources.
4. The students will demonstrate teamwork in applying alternative energy sources to a practical problem and defend their conclusions.

## Course Policies

<b>Attendance:</b>	Attendance will be taken at the beginning of each class period. DEDUCT 5 POINTS FOR EACH ABSENCE or 2 late arrivals/leaving early.
<b>Assignments:</b>	All assignments must be submitted prior to the beginning of class in the designated location. Late or improperly prepared work will not be accepted.
<b>Behavior:</b>	Disruptive behavior, vulgar language, sexual innuendo and/or harassment, safety violations, horseplay, etc. will not be tolerated in the classroom or laboratory. In the lab, students are not permitted to wander about the lab or compare their results with others. Work only with your partner. No eating or drinking is permitted in classrooms or laboratories per EET department policies. All cell phones must be turned off during lecture and lab periods.
<b>Exams and quizzes:</b>	Exams will be given at times listed in the class scheduled. All exams are cumulative. The final exam will be given at a time to be determined by the University during finals week.  Quizzes may be given at any time during the course as required by the instructor. No advanced notice will be given for quizzes and all quizzes will be given during a regularly scheduled lecture period.
<b>Ferris Connect:</b>	Ferris Connect site must referenced daily by students for access to instructor

	messages and course information. Exams will be administered through Ferris Connect.
<b>Grading Percentage:</b> (Earned Points/Total Points) * 100	In accordance with established policy in the Ferris State University catalog and student handbook. A = 92 – 100, A- = 90 – 91, B+ = 88 – 89, B = 82 – 87, B- = 80 – 81 C+ = 78 – 79, C = 72 – 77, C- = 70 – 71 D+ = 68 – 69, D = 62 – 67, D- = 60 – 61 F = 0 – 59
<b>Integrity:</b>	All of your assignments must be developed independently. Cheating of any type will result in loss of credit or more serious consequences.
<b>Student Responsibilities:</b>	Assistance in this course is available to help you with academic and other difficulties you may be experiencing. It is your responsibility to seek help. <ol style="list-style-type: none"> <li>1. Office hours – I will be happy to work with you during regularly scheduled office hours.</li> <li>2. Pre-scheduled assistance outside of normal office hours (as my schedule permits).</li> <li>3. Meet with your Academic advisor.</li> <li>4. Meet with an educational counselor</li> <li>5. The ACADEMIC SUPPORT SERVICES CENTER offers free tutoring and assistance for test anxiety, study skills, writing skills, exam preparation, content reading, personal growth, and classroom skills. The Center is located in Room 1017 of the Arts and Sciences Commons Buildings and they can be reached at 591-3543.</li> </ol>

### Course Schedule

Date	Lecture Topic	Preparation	Assignment
Week 1	Introduction		
	Introduction		
Week 2	Hydropower		
	Hydropower		
Week 3	Combustion Turbines		
	Combustion Turbines		
Week 4	Combustion Turbines		
	Active Solar Thermal Systems		
	Active Solar Thermal Systems		
Week 5	Wind & Photovoltaic Systems		
	Wind & Photovoltaic Systems		
Week 6	Fuel Cells		

Ferris State University  
College of Technology

---

Syllabus – Semester Year

	Fuel Cells		
Week 7	Fuel Cells		
	Fuel Cells		
Week 8	Combined Heat & Power Systems		
	Combined Heat & Power Systems		
Week 9	Biomass Systems		
	Biomass Systems		
Week 10	Biomass Systems		
	Biomass Systems		
Week 11	Geothermal Energy Systems		
	Geothermal Energy Systems		
Week 12	Geothermal Energy Systems		
	Ocean Systems		
Week 13	Nuclear Systems		
	Nuclear Systems		
Week 14	Energy Recycling		
	Energy Recycling		
Week 15	Energy Recycling		
Week 16	Review		
	Final Exam		
	Total		

**Course: ENGY 433**

**Energy Generation and Distribution Systems**

**Credits:** 4 Hours

**Contacts:** 3 Lecture, 2 Lab Hours per Week

**Course Description:** This course addresses the generation of electrical energy using conventional generators, photovoltaic arrays and wind turbines. Conversion of energy from direct current to alternating current, along with connecting different electrical systems to the electrical grid, using single and three-phase connections, will be covered. Basic efficiency, smart grid, net metering, load control and flow from different sources will be investigated.

**Course Prerequisites:** EEET 313

**Course Outline:** Attached

**Required Textbooks:** Reviewing at this time

**Course Web Site:** Reference materials, mandatory supplemental reading, assignments, instructor messages and other information are provided through the Ferris Connect site for this course. Daily reference is mandatory.

**Required Materials:**

**Reference Materials:**

*Other suggested or supplemental materials*

**Faculty: Prof.**

Office:

Phone: (231) 591 – xxxx

Alt. Phone:

Email: \_\_\_\_\_@ferris.edu

Alt. Email:

Office Hours:

Day	Times	Day	Times

## Student Learning Outcomes

---

Students satisfactorily completing this course will achieve/complete/demonstrate...:

1. The will have an understanding of the Generation of Electrical Energy and Power
2. The student will have an understanding of how electrical energy is used and transmitted in different forms
3. The student will have an understanding of distribution and storage potential for electrical energy.
4. The student will have a comprehension of controls used in electrical distribution systems and a "Smart Grid".
5. The student will have knowledge of the systems used for metering and measurement of electrical energy and system protections.

## Course Assessments

---

1. Students will be given a pretest on the first day to assess preparation for the course.
2. Students will be examined on electrical energy usage and transmission.
3. Students will be examined on distribution and storage of electrical energy.
4. Students will be examined on electrical distribution controls and smart grid technology.
5. Students will be examined on electrical metering systems.

## Course Policies

---

<b>Attendance:</b>	Attendance will be taken at the beginning of each class period. DEDUCT 5 POINTS FOR EACH ABSENCE or 2 late arrivals/leaving early.
<b>Assignments:</b>	All assignments must be submitted at the beginning of class in the designated location. Late or improperly prepared work will not be accepted.
<b>Behavior:</b>	Disruptive behavior, vulgar language, sexual innuendo and/or harassment, safety violations, horseplay, etc. will not be tolerated in the classroom or laboratory. In the lab, students are not permitted to wander about the lab or compare their results with others. Work only with your partner. No eating or drinking is permitted in classrooms or laboratories per EEET department policies. All cell phones must be turned off during lecture and lab periods.
<b>Exams and quizzes:</b>	Exams will be given at times listed in the class scheduled. The final exam will be given at a time to be determined by the University during finals week.  Quizzes may be given at any time during the course as required by the instructor.

Ferris State University  
College of Technology

Syllabus – Semester Year

	No advanced notice will be given for quizzes and all quizzes will be given during a regularly scheduled lecture period.
<b>Ferris Connect:</b>	Ferris Connect site must be referenced daily by students for access to instructor messages and course information.
<b>Grading Percentage:</b> (Earned Points/Total Points) * 100	In accordance with established policy in the Ferris State University catalog and student handbook. A = 92 – 100, A- = 90 – 91, B+ = 88 – 89, B = 82 – 87, B- = 80 – 81 C+ = 78 – 79, C = 72 – 77, C- = 70 – 71 D+ = 68 – 69, D = 62 – 67, D- = 60 – 61 F = 0 – 59
<b>Integrity:</b>	All of your assignments must be developed independently. Cheating of any type will result in loss of credit or more serious consequences.
<b>Student Responsibilities:</b>	Assistance in this course is available to help you with academic and other difficulties you may be experiencing. It is your responsibility to seek help. <ol style="list-style-type: none"> <li>1. Office hours – I will be happy to work with you during regularly scheduled office hours.</li> <li>2. Pre-scheduled assistance outside of normal office hours (as my schedule permits).</li> <li>3. Meet with your Academic advisor.</li> <li>4. Meet with an educational counselor. College Educational Counselor – Vordyn Nelson x 2890, JHN 200</li> <li>5. The ACADEMIC SUPPORT SERVICES CENTER offers free tutoring and assistance for test anxiety, study skills, writing skills, exam preparation, content reading, personal growth, and classroom skills. The Center is located in Room 1017 of the Arts and Sciences Commons Buildings and they can be reached at 591-3543.</li> </ol>

**Course Schedule**

Date	Lecture Topic	Preparation	Assignment
Week 1	Introduction		
	Voltage, current and Efficiency		
	Energy and Power		
Week 2	Resistive, Inductive and Capacitive Loads		
	Single Phase Electric Power		
	Three Phase Power		
Week 3	Exam #1		
Week 4	Single Phase AC Motors		
	Shaded-Pole Synchronous Motors		

Ferris State University  
College of Technology

Syllabus – Semester Year

Week 5	Wind Turbines		
	Photovoltaic Arrays		
Week 6	Distribution and Domestic Power Supply		
	Over-current Protection		
Week 7	Inverters and Battery Based AC		
	Batteries		
	Storage Technologies		
Week 8	Exam #2		
Week 9	Switched Mode Power Supply		
	Connecting System to Grid		
Week 10	Passive Control		
	Active (Electronic) Control		
Week 11	Computerized Control		
	"Smart" Grid System		
Week 12	Exam #3		
Week 13	Energy Meters		
	Mechanical Meters		
Week 14	Electronic Meters		
Week 15	System Protection		
Week 16	Exam #4		
	Final Exam		



## Bachelor of Science Degree Energy Systems Engineering Program Academic Requirements

Student:					Transfer Credits:	
Email:	ID:				GPA Major:	
Advisor:	Ph				GPA Degree:	
<b>MAJOR</b>		Cr	Gr	TR		
EEET 201	Electrical Fundamentals (Math 116)	3				
EEET 301	Controls for Automation and distribution.(EEET 201)	3				
EEET 323	Ind. Automation Controls (EEET 301)	4				
CAHS 208	Environmental Regulations I	4				
ENGY 323	Energy - Cradle to Grave (MECH 330)	3				
ETEC 140	Introduction to Drafting & CAD	3				
MECH 122	Computer Applications (MATH 116)	2				
MECH 222	Machine Design (MECH 340)	4				
MECH 211	Fluid Mechanics (PHYS 211, MATH 126, co-MECH 340)	4				
MECH 223	Thermodynamics (PHYS 211, MATH 220)	3				
MECH 311	Finite Element Analysis (ETEC 140, MECH 340)	2				
MECH 330	Heat Transfer (MECH 223)	3				
MECH 332	Mech. Measurements/Mechatronics(MFGE 341, MATH 116)	3				
MECH 340	Statics & Strength of Matl. (MATH 126, PHYS 211)	4				
MECH 341	Statics & Strength of Matl. Lab (co-MECH 340)	1				
MECH 393	Internship * (Senior Status)	4				
MECH 421	Senior Lab. (MECH 330, EEET 201)	4				
MECH 499	Senior Project (MECH 421, co-ENGL 311)	3				
MFGE 341	Quality Science Statistics (MATH 116)	3				
MFGE 423	Engineering Economics (MATH 1116)	2				
Total, minus MECH 393		58				
<b>Option - Building Energy Systems</b>						
MAN 321	Principles of Facilities Management (Instructors permission)	3				
HVAC 337	Mech & Elect. Systems for Buildings	3				
HVAC 483	HVACR Building Systems	3				
Elective		3				
		12				
<b>Option - Energy Generation and Distribution Systems</b>						
EEET 313	Electric Power and Machines (EEET 301)	4				
EEET 414	Ind. Process Communications (EEET 323)	4				
ENGY 433	Energy Generation and Distribution Systems (EEET 313)	4				
		12				
<b>Option - Alternative Energy Systems</b>						
BIOL 111	Environmental Biology	4				
ENGY 420	Energy Generation from Solar and Wind (ENGY 323)	4				
ENGY 430	Alternative fuels, Biomass/Hydrogen/Ethanol (ENGY 323)	4				
		12				
					<b>Total Credits in Program</b>	<b>128</b>
					+ ENGY 393 & FSUS 100	<b>5</b>
						<b>133</b>

Note: A minimum grade of C- is required for any EEET or ECNS course to qualify as a prerequisite for another EEET or ECNS course.

Bachelor of Science General Education Requirements:

One Global Consciousness Course (3cr), One Race - Ethnicity - Gender(REG) Course (3cr), and One Foundation Course(3cr) –

Multiple requirements may be satisfied by a single course.

Cultural Enrichment – 9 credits (3 credits in course > 200 level); Social Awareness - 9credits (3 credits in course > 200 level)

Students must complete 40 credits at or above the 300. [Reference: [http://www.ferris.edu/htmls/academics/gened/gen\\_edspecific.html](http://www.ferris.edu/htmls/academics/gened/gen_edspecific.html)]



Bachelor of Science Degree  
**Energy Systems Engineering**  
 Degree Course Sequence

Student:				Transfer Credits:							
Email:				ID:		GPA Major:					
Advisor:				Ph		GPA Degree:					
<b>Year 1 - Fall Semester</b>				<b>Crs.</b>		<b>Year 1 - Spring Semester</b>				<b>Crs.</b>	
MATH	220	Analytical Geometry - Calculus 1 (ACT of 26 or MATH 126)	5	MECH	122	Computer Applications (MATH 116)	2				
ETEC	140	Introduction to Drafting & CAD	3	CHEM	121	General Chemistry 1 (H.S. Chem or CHEM 103, MATH 115)	5				
ENGL	150	English 1 (14 or better on ACT)	3	MATH	230	Analytical Geometry - Calculus 2 (MATH 220, C- or better)	5				
FSUS	100	FSU Seminar	1	EEET	201	Electrical Fundamentals (Math 116)	3				
		Social Awareness Elective	3	ENGL	250	English 2 (ENGL 150 C- or better)	3				
			Total	15					Total	18	
<b>Year 2 - Fall Semester</b>				<b>Crs.</b>		<b>Year 2 - Spring Semester</b>				<b>Crs.</b>	
PHYS	241	General Physics 1 (MATH 116 or 26 ACT)	5	MECH	222	Machine Design (MECH 340)	4				
EEET	301	Controls for Automation and distribution.(EEET 201)	3	EEET	323	Ind. Automation Controls (EEET 301)	4				
MECH	211	Fluid Mechanics (PHYS 211, MATH 126, co-MECH 340)	4	MECH	223	Thermodynamics (PHYS 211, MATH 220)	3				
MECH	340	Statics & Strength of Matl. (MATH 126, PHYS 211)	4	PHYS	242	General Physics 2 (PHYS 211 C- or better)	5				
MECH	341	Statics & Strength of Matl. Lab (co-MECH 340)	1								
			Total	17					Total	16	
<b>Year 3 - Fall Semester</b>				<b>Crs.</b>		<b>Year 3 - Spring Semester</b>				<b>Crs.</b>	
MECH	311	Finite Element Analysis (ETEC 140, MECH 340)	2	ENGY	323	Energy - Cradle to Grave (MECH 330)	3				
MFGE	341	Quality Science Statistics (MATH 116)	3	MECH	332	Mech. Measurements/Mechatronics(MFGE 341, MATH 116))	3				
BURE	331	Ethics in Engineering (C.E.) (ENGL 150)	3	MATH	330	Differential Equations (MATH 230, C- or better)	3				
MECH	330	Heat Transfer (MECH 223)	3	COMM	121	Fundamentals of Public Speaking	3				
		Social Awareness Elective (200 level or above)	3			Cultural Enrichment Elective	3				
		Option.	3			Option (3 or 4 credit course)	3				
			Total	17					Total	18	
<b>Year 4- Fall Semester</b>				<b>Crs.</b>		<b>Year 4 - Spring Semester</b>				<b>Crs.</b>	
MFGE	423	Engineering Economics (MATH 1116)	2	MECH	499	Senior Project (MECH 421, co-ENGL 311)	3				
CAHS	208	Environmental Regulations I	4	ENGL	311	Advanced Technical Writing (ENGL 250, C or better)	3				
MECH	421	Senior Lab. (MECH 330, EEET 201)	4			Cultural Enrichment Elective	3				
		Social Awareness Elective	3			Option (3 or 4 credit courses)	3				
		Option (3 or 4 credit course)	3								
			Total	16					Total	12	
<b>Option - Building Energy Systems</b>						<b>Option - Alternative Energy Systems</b>					
FMAN	321	Principles of Facilities Management (Instructors permission)	3	F	BIOL	111	Environmental Biology	4	F		
HVAC	337	Mech & Elect. Systems for Buildings	3	F/S	ENGY	420	Energy Generation from Solar and Wind (ENGY 323)	4	S		
HVAC	483	HVACR Building Systems	3	S	ENGY	430	Alternative fuels, Biomass/Hydrogen/Ethanol (ENGY 323)	4	F		
		Elective	3								
			Total	12					Total	12	
<b>Option - Energy Generation and Distribution Systems</b>											
EEET	313	Electric Power and Machines (EEET 301)	4					Total minus FSUS 100	128		
EEET	414	Ind. Process Communications (EEET 323)	4	F	MECH	393	Internship * (Senior Status)	4			
ENGY	433	Energy Generation and Distribution Systems (EEET 313)	4	S			Summer between Jr & Sr. year				
		Electives		S	FSUS	100	FSU Seminar	1			
			Total	12					Total Credits	133	



Leonard Johnson/FSU  
02/16/2010 12:10 PM

To Thomas W Hollen/FSU@FERRIS, Ronald A  
McKean/FSU@FERRIS  
Thomas E Oldfield/FSU@Ferris, Sandra L  
cc Alspach/FSU@FERRIS, Leonard Johnson/FSU@Ferris,  
Andrew L Purvis/FSU@FERRIS, Barbara A  
bcc  
Subject Energy Systems Engineering

Hi Tom

The UCC met yesterday and discussed at length your proposal to add a new degree in Energy Systems Engineering. There are several revisions which will need attention before we'll be able to move the proposal on to the Academic Senate. Specifically,

- 1) EEET 413 is currently an "inactive" course. To reactivate the course, complete a Form F "Modify" and under 1a (where you list the changes to be made), note that you would like to reactivate the course exactly as it was--being sure to include a Form E on which outcomes and assessment information for the course are included.
- 2) Add EEET 414 to the list of courses under 2d on the Form A (page 4 of your proposal).
- 3) Work with CAHS to create CAHS 208. This new course will need to be approved before we can approve the proposed degree.
- 4) Add prerequisites (in parentheses beside each course will be fine) to courses listed on both the semester by semester overview and the program checksheet (Form D). Also, make it clear on each sheet how and when a student completes required courses in a particular option.
- 5) Identify, or create anew, a department for newly created courses, and check with Jo Gerst in the records office to verify how that department should be coded on the Form Fs.
- 6) Address concerns raised by Nagelkirk concerning physical limitations for offering FMAN 321 and HVAC 483.
- 7) Course descriptions on pages 30 and 31 must be limited to 75 words.
- 8) Clarify the final sentence in your course description on page 32.
- 9) Page 33, clarify your intentions on llm & n (perhaps this could be resolved by simply whiting out EEET 433 as an equivalent course??) To clarify: on llm you have checked the box "no" to the question "does the proposed new course replace an equivalent course?"....Then you list EEET 433 as an equivalent!
- 10) Revise your list of program outcomes to include only those specific to the program. (Currently, there are gen ed outcomes on the list),...., make sure all outcomes are stated in measureable terms, and that they are listed on the Form D (curriculum checksheet).

Please contact Ron Mehringer or me should you have any questions. If all requested revisions are received by Tuesday, February 23, the UCC will be able to add this to the agenda for the March 2 meeting of the Academic Senate.

Thanks.

Leonard

Response to concerns with comments by Thomas Hollen

The UCC met yesterday and discussed at length your proposal to add a new degree in Energy Systems Engineering. There are several revisions which will need attention before we'll be able to move the proposal on to the Academic Senate. Specifically,

- 1) EEET 413 is currently an "inactive" course. To reactivate the course, complete a Form F "Modify" and under 1a (where you list the changes to be made), note that you would like to reactivate the course exactly as it was--being sure to include a Form E on which outcomes and assessment information for the course are included.

Error in typing. Should be EEET 414. Changed.

- 2) Add EEET 414 to the list of courses under 2d on the Form A (page 4 of your proposal).

Changed

- 3) Work with CAHS to create CAHS 208. This new course will need to be approved before we can approve the proposed degree.

Per Joanne Gerst, we will use CAHS 208, and Dr. Haneline will process paperwork for it. She thought it had already been done last year.

- 4) Add prerequisites (in parentheses beside each course will be fine) to courses listed on both the semester by semester overview and the program checksheet (Form D). Also, make it clear on each sheet how and when a student completes required courses in a particular option.

Done.

- 5) Identify, or create a new, a department for newly created courses, and check with Jo Gerst in the records office to verify how that department should be coded on the Form Fs.

Request made to Dean's office correct this and create "ENGY" program and course prefix. Ron McKean is processing

- 6) Address concerns raised by Nagelkirk concerning physical limitations for offering FMAN 321 and HVAC 483.

The comments by Nagelkirk were overlooked as they were on Form B, not with the comments from the college curriculum committee. Diane Nagelkirk comments concerned the statement that the program would expect to have 120 students after 3 years (40 per level), and that as FMAN 321 was in the program, they could not handle 40 students, only 8-10.

First, FMAN 321 is in only one of three paths students may take. The Building Energy Systems option may only be taken by 5-10 students a year. This would fit with the ability of this course to handle an additional 8-10 student, as stated by Diane. If we cap that path at 10 students per year, this would solve the problem.

Second, I talked with Joe Samson on 2/17 about the course. Joe is teaching the course now. One of the sections is for recreation students, and there is some uncertainty about those students in the future. It was agreed that we would leave the FMAN 321 on the

checksheet, and consider other alternatives in the 2 years before the course would be required.

Third, HVAC 451 Energy Audits, would be a better fit for the program, then FMAN 321. But the pre-req. is HVAC 393, Internship, which not be a problem, except the pre-reqs for the internship would require students to take a number of other courses. It was agreed, in talking with Joe, that a course on energy auditing needs to be developed that can be taught to a wide range of students. This is a consideration for the program as a future curriculum change, if such as course is developed. There is interest for it, even as a certificate. John Schmidt also has an interest in bring his programs into the energy arena.

- 7) Course descriptions on pages 30 and 31 must be limited to 75 words.

Changed all descriptions to less than 75 words. Done.

- 8) Clarify the final sentence in your course description on page 32.

Moved its position, but energy recycling is the key to our future. All energy goes to heat, eventually. We must learn how to recycle energy before it becomes unusable heat. GM is doing this by looking at capturing the heat from the exhaust pipe of autos, and turning it back into electricity which is fed back into the auto's electrical system. There are many ways to recycle energy, and we need to do it now!

- 9) Page 33, clarify your intentions on IIm & n (perhaps this could be resolved by simply whiting out EEET 433 as an equivalent course??) To clarify: on IIm you have checked the box "no" to the question "does the proposed new course replace an equivalent course?"....Then you list EEET 433 as an equivalent!

Mistake. Eliminated equivalency

- 10) Revise your list of program outcomes to include only those specific to the program. (Currently, there are gen ed outcomes on the list),,,,,, make sure all outcomes are stated in measureable terms, and that they are listed on the Form D (curriculum checksheet).

Program outcomes may appear to be Gen Ed., but they are those specified by EAC-ABET for accreditation of the program. Therefore they must be left as part of the program.

A matrix was developed to show how the outcomes relate to specific courses. **Matrix.xls**

An example of the means of assessment is shown in Assessment tool **ENGY 323.xlsx**

The matrix is taken from ABET as shown in TracDat for the Surveying program, which is EAC-ABET accredited. The Assessment tool was originally developed and being used, the Mechanical Engineering Technology program, which is TAC-ABET accredited.

- 11) MECH 332 has a pre-req of MFGE 341, which was not in program

AS EEET 414 was doubled in the program, MFGE 341 was added without changing the total number of credits. Another Form B for this course, signed by Gary Ovans on 2/18/10 is included in package.

Please contact Ron Mehringer or me should you have any questions. If all requested revisions are received by Tuesday, February 23, the UCC will be able to add this to the agenda for the March 2 meeting of the Academic Senate.

Thanks.

Leonard

I believe all concerns have been addressed and included in a ZIPPED package called ENGY Program.

Thomas Hollen 2/18/10

Thomas W Hollen/FSU  
02/16/2010 12:43 PM

To Leonard Johnson/FSU@Ferris  
Andrew L Purvis/FSU@FERRIS, Barbara A  
cc Ross/FSU@FERRIS, Donald Flickinger/FSU@FERRIS, Fritz  
J Erickson/FSU@FERRIS, Harold G Palmer/FSU@FERRIS,  
bcc  
Subject Re: Energy Systems Engineering

I met with Ron Mehringer this morning. He gave me a list of problems which I believe is the same as yours. I will have them corrected and back by this Thursday.

Thomas W. Hollen, P.E.  
Interim Director, School of Computer, Electrical, Mechanical, Energy and Surveying Systems  
Associate Professor, Mechanical Engineering Technology  
College of Engineering Technology  
Ferris State University  
915 Campus Dr., SWAN 405  
Big Rapids, MI 49307  
231-591-5282  
Hollent@ferris.edu  
Leonard Johnson/FSU



Leonard Johnson/FSU  
02/16/2010 12:10 PM

To Thomas W Hollen/FSU@FERRIS, Ronald A  
McKean/FSU@FERRIS  
cc Thomas E Oldfield/FSU@Ferris, Sandra L  
Alspach/FSU@FERRIS, Leonard Johnson/FSU@Ferris,  
Andrew L Purvis/FSU@FERRIS, Barbara A  
Ross/FSU@Ferris, Joanne Gerst/FSU@FERRIS, Paula L  
Hadley-Kennedy/FSU@Ferris, Donald  
Flickinger/FSU@FERRIS, Harold G Palmer/FSU@Ferris,  
Terrence J Doyle/FSU@FERRIS, Ronald A  
Mehringer/FSU@FERRIS, Kristen L Motz/FSU@FERRIS,  
Fritz J Erickson/FSU@FERRIS, Tracey  
Boncher/FSU@FERRIS, Steve Karnes/FSU@FERRIS, Mitzi  
A Day/FSU@Ferris  
Subject Energy Systems Engineering

Hi Tom

The UCC met yesterday and discussed at length your proposal to add a new degree in Energy Systems Engineering. There are several revisions which will need attention before we'll be able to move the proposal on to the Academic Senate. Specifically,

- 1) EEET 413 is currently an "inactive" course. To reactivate the course, complete a Form F "Modify" and under 1a (where you list the changes to be made), note that you would like to reactivate the course exactly as it was--being sure to include a Form E on which outcomes and assessment information for the course are included.
- 2) Add EEET 414 to the list of courses under 2d on the Form A (page 4 of your proposal).
- 3) Work with CAHS to create CAHS 208. This new course will need to be approved before we can approve the proposed degree.

- 4) Add prerequisites (in parentheses beside each course will be fine) to courses listed on both the semester by semester overview and the program checksheet (Form D). Also, make it clear on each sheet how and when a student completes required courses in a particular option.
- 5) Identify, or create anew, a department for newly created courses, and check with Jo Gerst in the records office to verify how that department should be coded on the Form Fs.
- 6) Address concerns raised by Nagelkirk concerning physical limitations for offering FMAN 321 and HVAC 483.
- 7) Course descriptions on pages 30 and 31 must be limited to 75 words.
- 8) Clarify the final sentence in your course description on page 32.
- 9) Page 33, clarify your intentions on l1m & n (perhaps this could be resolved by simply whiting out EEET 433 as an equivalent course??) To clarify: on l1m you have checked the box "no" to the question "does the proposed new course replace an equivalent course?"....Then you list EEET 433 as an equivalent!
- 10) Revise your list of program outcomes to include only those specific to the program. (Currently, there are gen ed outcomes on the list),...., make sure all outcomes are stated in measureable terms, and that they are listed on the Form D (curriculum checksheet).

Please contact Ron Mehringer or me should you have any questions. If all requested revisions are received by Tuesday, February 23, the UCC will be able to add this to the agenda for the March 2 meeting of the Academic Senate.

Thanks.

Leonard

Leonard R. Johnson, Ph.D  
Professor of Education and Chair,  
Strategic Planning and Resources Council  
University Curriculum Committee  
Ferris State University  
1349 Cramer Circle  
Big Rapids, Michigan 49307  
(231) 591-2134  
<http://www.ferris.edu/education/education>

Revised 7/23/07

**PROPOSAL SUMMARY AND ROUTING FORM**

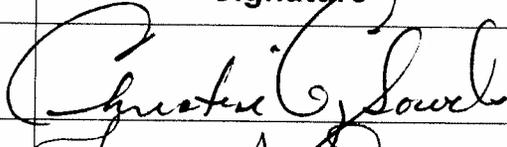
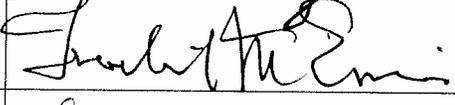
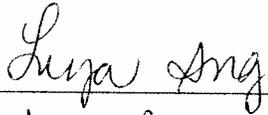
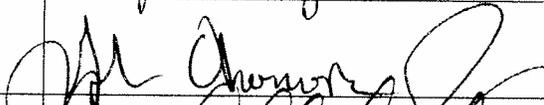
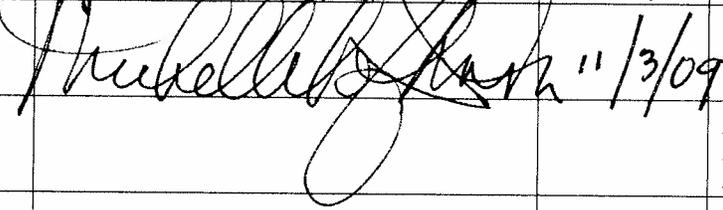
**Proposal Title:** Reduction of Credits for M.Ed.:C&I Reading Endorsement

**Initiating Unit or Individual:** Reading Department

**Contact Person's Name:** Marlene Braunius, Nancy Lashaway-Bokina e-mail: braunim@ferris.edu, lashawan@ferris.edu phone: 231-591-2705, 231-591-5368

**Date or Term of Proposal Implementation:** ~~Spring~~ 2010 Fall

- 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		9/30/09	5 Support 2 Support with Concerns 0 Not Support
Department Faculty		10/20/09	14-0 Support 0 Support with Concerns 0 Not Support
Department Head			✓ Support Support with Concerns Not Support
College Curriculum Committee		10/30/09	✓ Support Support with Concerns Not Support
Dean		11/3/09	✓ 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)

## 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.)

**Proposal.** The following proposal seeks to delimit the offerings in the **Master of Education Degree – Curriculum & Instruction** with the **Reading Endorsement Option** (BR Endorsement) from 39 credits to 33 credits.

**Rationale.**

1. The intent of this proposal is to redesign the quantity and quality of the existing program requirements in order to make it more marketable and competitive with other Michigan Reading Master's degree-granting institutions.\*
2. The proposed changes are intended to make the degree more financially attractive and more time-efficiently attainable for practicing teachers.
3. To reduce the quantity of the course offerings, the content of two courses (ERLA 600 Curriculum & Professional Development for Literacy Programs and ERLA 609 Developing Literacy Leaders) will be combined into a new course to be renumbered ERLA 515 and renamed Leadership in K-12 Literacy Curriculum and Instruction.
4. To enhance the quality of the course offerings, the following action will be taken:
  - a. The essential components that produce effective literacy teachers and leaders will be identified and aligned with the International Reading Association's Standards for Reading Professionals (2003) and the Michigan Standards for Reading Specialists (2000).
  - b. The overlap and redundancy caused by course (either/or) options and electives within the current program, which have created staffing and planning challenges for the rotation and delivery of classes, will be eliminated;
  - c. Tenure-track faculty or qualified adjunct instructors with terminal degrees will teach the classes. Adjunct faculty will be educated on the course content, hallmark assignments, and assessment measures to be implemented.
  - d. There will be continued intentional articulation of this Reading Endorsement with other Curriculum and Instruction Masters' Degree endorsements, i.e., Special Education, Career Technology, and Administration.
5. A local school district and Ferris State University partnership will be formed. As the result of this partnership:
  - a. A reciprocal relationship will be established between the Reading Endorsement Master's Degree students and the local district's students, faculty, and administrators;
  - b. Reflective literacy practitioners who study current theory, research, and best practices will oversee and practice their skills and knowledge in a real-life setting;
  - c. The creation of a summer reading program (FSU Summer Literacy Clinic) to aid at-risk students will be created. Reading Master's students, in connection with the ERLA 530 Literacy Assessment course, will be required to mentor a struggling reader in a supervised practicum by diagnosing strengths and needs, developing an intervention plan, implementing that plan, and documenting the results through a case study report which will be shared with the child's school and parents.

---

\*Credits required for comparable degrees at these state colleges and universities:

Western Michigan University 30  
 Calvin College 32-33  
 Central Michigan University 33-36  
 Saginaw Valley State University 36

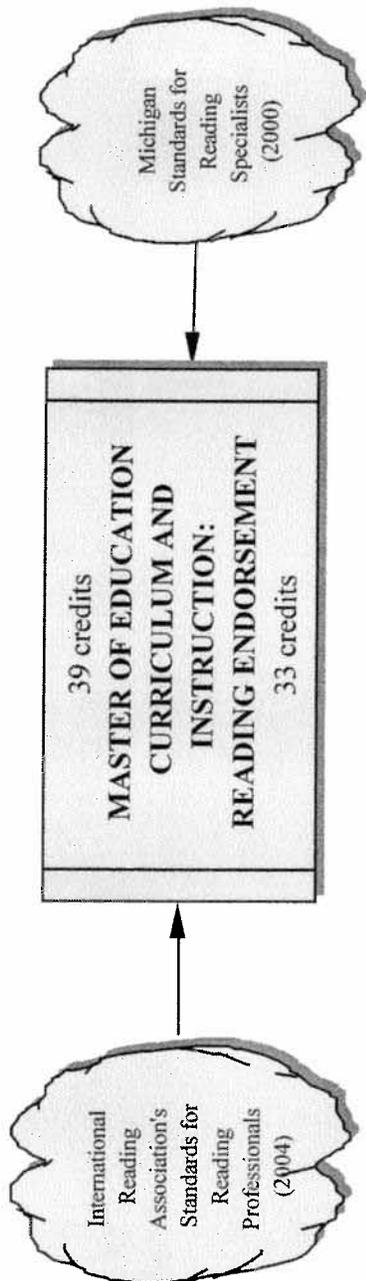
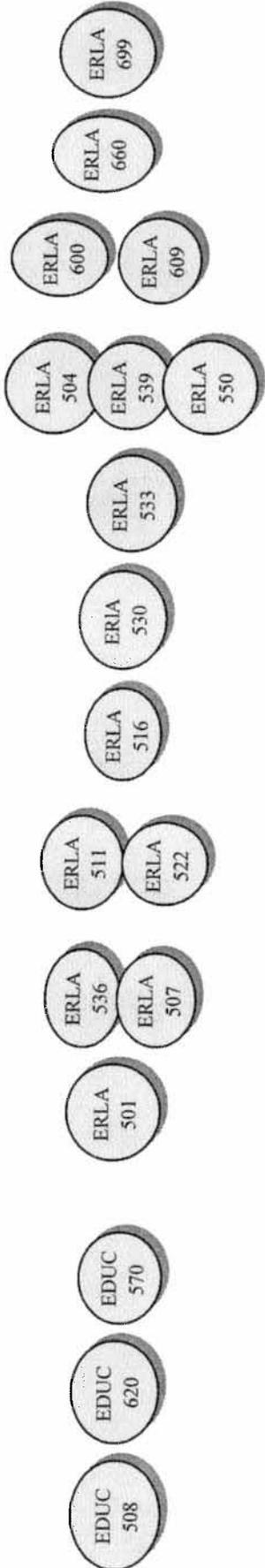
Michigan State University 30  
 Grand Valley State University 33  
 Oakland University 36

Marygrove College 30  
 Madonna University 32  
 Aquinas College 36

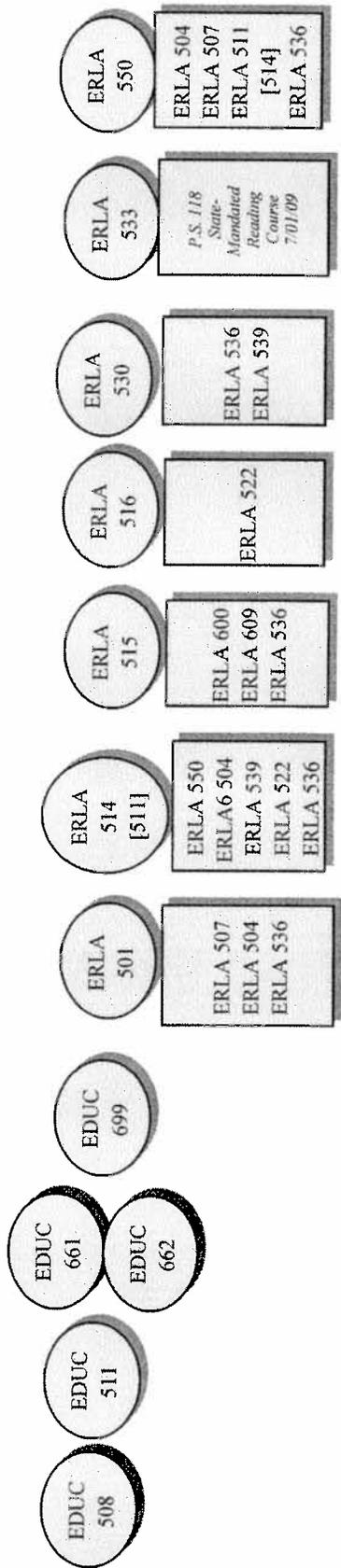
- EDUC 508
- EDUC 520
- EDUC 570
- ERLA 501
- ERLA 536
- ERLA 507
- ERLA 511
- ERLA 512
- ERLA 516
- ERLA 530
- ERLA 533
- ERLA 504
- ERLA 539
- ERLA 550
- ERLA 600
- ERLA 609
- ERLA 660
- ERLA 699
- ECTE 521
- EDMC 560
- EDUC 630
- ERLA 591
- ERLA 595
- ERLA 600
- ERLA 604
- ERLA 607

- EDUC 508
- EDUC 511
- EDUC 661
- EDUC 662
- EDUC 699
- ERLA 501
- ERLA 514
- ERLA 515
- ERLA 516
- ERLA 530
- ERLA 533
- ERLA 550

CURRENT (39 credits)



PROPOSED (33 credits)



## 2. Summary of All Course Action Required

### a. Newly Created Course to FSU:

Prefix	Number	Title
ERLA	515 <small>(formerly ERLA 600 &amp; ERLA 609)</small>	Leadership in K-12 Literacy Curriculum and Instruction

### b. Courses to be Deleted From FSU Catalog:

Prefix	Number	Title
ERLA	511 <small>(renumbered ERLA 514)</small>	Literacy and Content Learning
ERLA	600	Curriculum and Professional Development for Literacy Programs
ERLA	609	Developing Literacy Leaders
ERLA	660	Literacy Research Design
ERLA	669	Literacy Research [Thesis]

### c. Existing Course(s) to be Modified:

Prefix	Number	Title
ERLA	501	Understanding Literacy and Language Development
ERLA	515 <small>(formerly ERLA 600 &amp; ERLA 609)</small>	Leadership in K-12 Literacy Curriculum and Instruction
ERLA	516	Trends and Issues in Literacy
ERLA	530	Literacy Assessment
ERLA	550	Creating Learning Environment for Literacy Development and Diverse Populations

### d. Addition of Existing FSU Courses to Program

Prefix	Number	Title
ERLA	514 <small>(formerly ERLA 511)</small>	Literacy and Content Learning
EDUC	511 <small>(prereq for EDUC 661 &amp; EDUC 662)</small>	Principles of Education Evaluation-Research
EDUC	661 <small>(in lieu of ERLA 660)</small>	Quantitative Research Methods
EDUC	662 <small>(in lieu of ERLA 660)</small>	Qualitative Research Methods
EDUC	699 <small>(in lieu of ERLA 669)</small>	Capstone Thesis

### e. Removal of Existing FSU Courses from Program

Prefix	Number	Title
EDUC	570	Teaching and Learning Theories in the Classroom
ERLA	504*	Integrating the English Language Arts for Elementary/Middle School
ERLA	507*	Literacy and Language Development for Young Children
ERLA	522*	Using Literature and Other Texts for Children and Adults
ERLA	536*	Elementary and Middle School Reading Instruction
ERLA	539*	Integrating Reading, Writing, and Literature Across the Curriculum

\*Note: These courses represent the elimination of either/or choices within the original program. Their objectives were compacted and combined with retained courses.

### f. Choose one

EDUC 508 Instruction of Exceptional Learners (eliminate if EDUC 308 was taken)

or

EDUC 620 Advanced Integrated Curriculum Design & Evaluation

# M.ED. CURRICULUM & INSTRUCTION: READING ENDORSEMENT

## PROPOSED

COURSE	TEXTBOOKS	HALLMARK ASSIGNMENTS	COMPACTED
<p><b>ERLA 501</b> Understanding Literacy and Language Development</p>	<ul style="list-style-type: none"> <li>Graves, M., Juel, C., &amp; Graves, B. (2007). <i>Teaching reading in the 21<sup>st</sup> century</i> (4<sup>th</sup> ed.). Boston: Pearson, Allyn &amp; Bacon. ISBN 0-205-49264-9</li> <li>Flood, J. &amp; Anders, P. (eds.). (2005). <i>Literacy development of students in urban schools: Research and policy</i>. Portsmouth, NH: Heinemann. ISBN 0-87207-543-5</li> </ul>	<ul style="list-style-type: none"> <li>Reflective Journal: Stages of Literacy and Language Development (Birth-Middle School)</li> <li>Panel Discussion: Literacy Development in Urban Schools</li> </ul>	<p><b>ERLA 507</b> Literacy &amp; Language Development for Young Children  <b>ERLA 504</b> Integrating the English Lang. Arts for Elementary/Middle School  <b>ERLA 536</b> Elementary &amp; Middle School Reading Instruction</p>
<p><b>ERLA 514</b> [511] Literacy and Content Learning</p>	<ul style="list-style-type: none"> <li>Vacca, R. T. &amp; Vacca, J. L. (2008). <i>Content area reading: Literacy and learning across the curriculum</i> (9<sup>th</sup> ed.). Boston: Allyn &amp; Bacon. ISBN-10: 0205532152    ISBN-13: 9780205532155</li> <li>Allen, J. <i>More tools for teaching content literacy</i>. (2008). 9A-0771. Portland, ME: Stenhouse.</li> </ul>	<ul style="list-style-type: none"> <li>Content Area Paper: Unique Reading and Writing Challenges in [a Specific Content Area]</li> <li>Microteaching: Demonstration Lesson in Specific Content Area</li> </ul>	<p><b>ERLA 550</b> Creating a Learning Environment for Literacy Development &amp; Diverse Populations  <b>ERLA 504</b> Integrating the English Language Arts for Elementary/Middle School  <b>ERLA 539</b> Integrating Reading, Writing, &amp; Literature Across the Curriculum  <b>ERLA 522</b> Using Literature &amp; Other Texts for Children &amp; Adults  <b>ERLA 536</b> Elementary &amp; Middle School Reading Instruction</p>
<p><b>ERLA 515</b> Leadership in K-12 Literacy Curriculum and Instruction</p>	<ul style="list-style-type: none"> <li>Gambrell, L., Morrow, L., &amp; Pressley, M. (eds.). (2007). <i>Best practices in literacy instruction</i> (3<sup>rd</sup> ed.). New York: Guilford Press. ISBN-13 978-1-59385-391-4 ISBN-10 1-59385-391-2</li> <li>Wepner, S. &amp; Strickland, D. (eds.). (2008). <i>The administration and supervision of reading programs</i> (4<sup>th</sup> ed.). New York: Teachers College Press. ISBN 978-0-8077-4849-7</li> </ul>	<ul style="list-style-type: none"> <li>District Literacy Project Interviews (Children, Reading Specialist/ Coach, Principal) District Literacy Needs Assessment Plan Literacy Professional Development Workshop or Action Research Project</li> </ul>	<p><b>[ERLA 600</b> Curriculum &amp; Professional Development for Literacy Programs  <b>ERLA 609</b> Developing Literacy Leaders]  <b>ERLA 536</b> Elementary &amp; Middle School Reading Instruction</p>

<p><b>ERLA 516</b> Trends and Issues in Literacy</p>	<ul style="list-style-type: none"> <li>Robinson, R. &amp; McKenna, M. (2008). <i>Issues and trends in literacy education</i> (4<sup>th</sup> ed.). Boston: Allyn &amp; Bacon. ISBN-10: 0205520316/ISBN-13: 9780205520312</li> <li>Smith, N. (2003). <i>American reading instruction</i>. Special edition. Newark, DE: International Reading Association. ISBN-13: 9780872073487</li> </ul>	<ul style="list-style-type: none"> <li>History of Reading Instruction Timeline</li> <li>Meta-analysis: IRA's "Hot Topics"/Scholarly Paper for Publication</li> </ul>	<p><b>ERLA 522</b> Using Literature &amp; Other Texts for Children &amp; Adults</p>
<p><b>ERLA 530</b> Literacy Assessment</p>	<ul style="list-style-type: none"> <li>Caldwell, J. &amp; Leslie, L. (2009). <i>Intervention strategies to follow informal reading inventory assessment: So what do I do now?</i> (2nd ed.). Boston: Pearson Allyn &amp; Bacon. ISBN -13: 978-0-205-60855-3 ISBN-10: 0-205-60855-8</li> <li>Leslie, L. &amp; Caldwell, J. (2006). <i>Qualitative reading inventory-4</i>. Boston: Pearson Allyn &amp; Bacon. ISBN 0-205-44327-3</li> </ul>	<ul style="list-style-type: none"> <li>Informal Reading Inventory w/Case Study</li> <li>Practicum/Mentoring: FSU Literacy Clinic w/Videorecording</li> </ul>	<p><b>ERLA 536</b> Elementary &amp; Middle School Reading Instruction</p> <p><b>ERLA 539</b> Integrating Reading, Writing, &amp; Literature Across the Curriculum</p>
<p><b>ERLA 533</b> Students with Reading Difficulties</p>	<ul style="list-style-type: none"> <li>Routman, R. (2002). <i>Reading essentials: The specifics you need to teach reading well</i>. Portsmouth, NH: Heinemann. ISBN-0-325-00492-7</li> <li>Shanker, J. &amp; Cockrum, W. (2009). <i>Locating and correcting reading difficulties</i> (9<sup>th</sup> ed.). Boston: Allyn &amp; Bacon. ISBN-10: 0131722409 ISBN-13: 9780131722408</li> <li>Esquith, R. (2007). <i>Teach like your hair's on fire: The methods and madness inside room 56</i>. Viking: Penguin.</li> </ul>	<ul style="list-style-type: none"> <li>Case Studies(2)</li> <li>Action Research Literacy Project</li> </ul>	
<p><b>ERLA 550</b> Creating a Learning Environment for Literacy Development and Diverse Populations</p>	<ul style="list-style-type: none"> <li>Gipe, J. (2010). <i>Multiple paths to literacy: assessment and differentiated instruction for diverse learners. K-12</i> (7<sup>th</sup> ed.). Boston: Pearson. ISBN-13: 978-13-208089-7, ISBN-10: 0-13-208089-3</li> <li>Freeman, Y., Freeman, D., &amp; Ramirez, R. (Eds.) (2008). <i>Diverse learners in the mainstream classroom: supporting ALL students across content areas</i>. Portsmouth, NH: Heinemann. ISBN-13: 978-0-325-01313-8, ISBN-10: 0-325-01313-6</li> </ul>	<ul style="list-style-type: none"> <li>Diversity Project District Survey</li> <li>Role Reversal Narratives Lesson Plan Differentiation</li> <li>Literacy Professional Development Workshop (Michigan Reading Convention Proposal)</li> </ul>	<p><b>ERLA 504</b> Integrating the English Language Arts for Elementary/Middle School</p> <p><b>ERLA 507</b> Literacy &amp; Language Development for Young Children</p> <p><b>ERLA 511 [514]</b> Literacy and Content Learning</p> <p><b>ERLA 536</b> Elementary &amp; Middle School Reading Instruction</p>

## 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** Reduction of Credits for M.Ed.:C&I Reading Endorsement

**Initiator(s):** Reading Department

**Proposal Contact:** Marlene Braunius, Nancy Lashaway-Bokina **Date Sent:**  / /09

**Department:** School of Education **Campus Address:** 1349 Cramer Circle, Bishop 405  
(Please print)

**Responding Department:** University Graduate Curriculum Committee

Chair/Head/Coordinator: Nancy Hogan 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.

*With the reduction of credit requirements and the elimination of seven courses from the M.Ed.:C&I Reading Endorsement program and with the addition of only one course, it is anticipated that there will be a **reduction** of conflicts regarding scheduling, room assignments, and faculty load for the department.*

## 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:** Reduction of Credits for M.Ed.:C&I Reading Endorsement

**Projected number of students per year affected by proposed change:** 20

**Initiator(s):** Reading Department

**Proposal Contact:** Marlene Braunius, Nancy Lashaway-Bokina Date Sent: \_\_\_\_\_

**Department:** Reading—School of Education **Campus Address:** 1349 Cramer Circle, Bishop 405  
(Please print)

**Liaison Librarian (Kristy Motz) Signature:** \_\_\_\_\_ **Date :** \_\_\_\_\_

**Dean of FLITE Signature:** \_\_\_\_\_ **Date Returned:** \_\_\_\_\_

Based upon our review on \_\_\_\_\_ (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.**

*Several courses would be eliminated from the M.Ed.:C&I Reading Endorsement program. The objectives in the remaining courses would compact and/or combine the objectives from the deleted courses. The one newly-named course prefix and title would be a combination of two previous courses.*

## FORM D CURRENT

**Ferris State University – College of Education & Human Services**  
**Master of Education Degree – Curriculum & Instruction**  
**Reading Endorsement Option\* - 39 credits**  
 (BR Endorsement)

COURSE	Core Requirements	SH	GRADE
EDUC 508	Instruction of Exceptional Learners	3	
EDUC 620	Advanced Integrated Curriculum Design & Evaluation	3	
EDUC 570	Teaching & Learning Theories in the Classroom	3	
	<b>Reading Requirements</b>		
ERLA 501	Understanding Literacy & Language Development	3	
ERLA 536 <i>or</i>	Elementary & Middle School Reading Instruction <i>or</i>	3	
ERLA 507	Literacy & Language Development for Young Children		
ERLA 511 <i>or</i>	Literacy and Content Learning <i>or</i>	3	
ERLA 522	Using Literature & Other Texts for Children & Adults		
ERLA 516	Trends & Issues in Literacy	3	
ERLA 530	Literacy Assessment	3	
ERLA 533	Students with Reading Difficulties	3	
ERLA 504 <i>or</i>	Integrating the English Lang. Arts for Elementary/Middle School <i>or</i>	3	
ERLA 539 <i>or</i>	Integrating Reading, Writing, & Lit. Across the Curriculum <i>or</i>		
ERLA 550	Creating Learning Environ. for Lit. Dev. & Diverse Populations		
ERLA 600 <i>or</i>	Curriculum & Professional Development for Literacy Programs <i>or</i>	3	
ERLA 609	Developing Literacy Leaders		
ERLA 660	Literacy Research Design (prior to ERLA 699)	3	
ERLA 699	Literacy Research (thesis) (final course)	3	
	<b>Education Electives</b> (not required--electives/substitutes only)		
ECTE 521	Leadership & Organizational Dynamics	3	
EDUC 560	Adv. Applications of Educational Technology in the Classroom	2	
EDUC 630	School Law	3	
ERLA 591	Internship in Reading & Literacy	1-3	
ERLA 595	Content/Instructional Workshops Seminar	1-2	
ERLA 690	Special Topics in Reading & Literacy	1-4	
ERLA 694	Graduate Topics in Reading & Literacy	1-6	
ERLA 697	Special Topics in Reading & Literacy	1-3	

\*Note: This program is open only to those already holding a K-12 teacher certification.

\*\*EDUC 660 must be taken prior to EDUC 699 (EDUC 699 is the student's last course.)

*Though faculty advisors are responsible for advising students regarding degree requirements, it is the student who is ultimately responsible for choosing the correct courses and for following the correct program.*

## FORM D PROPOSED

**Ferris State University – College of Education & Human Services**  
**Master of Education Degree – Curriculum & Instruction**  
**Reading Endorsement (BR) Option\* - 33 credits**

<b>COURSE</b>	<b>REQUIREMENTS</b>	<b>SH</b>	<b>GRADE</b>
EDUC 508 <i>or</i> EDUC 620	Instruction of Exceptional Learners (if EDUC 308 had not been taken) <i>or</i> Advanced Integrated Curriculum Design & Evaluation	3	
EDUC 511	Principles of Education Evaluation and Research	3	
EDUC 661 <i>or</i> EDUC 662	Quantitative Research Methods (Prerequisite EDUC 511) <i>or</i> Qualitative Research Methods (Prerequisite EDUC 511)	3	
EDUC 699	Capstone Thesis (Prerequisite: EDUC 661 <i>or</i> EDUC 662)	3	
ERLA 501	Understanding Literacy & Language Development	3	
ERLA 514	Literacy and Content Learning	3	
ERLA 515	Leadership in K-12 Literacy Curriculum and Instruction	3	
ERLA 516	Trends and Issues in Literacy	3	
ERLA 530	Literacy Assessment	3	
ERLA 533	Students with Reading Difficulties (Meets P.A. 118 Requirement)	3	
ERLA 550	Creating Learning Environment for Literacy Development and Diverse Populations	3	

\*Note: This program is open only to those already holding a K-12 teacher certificate.

*Though faculty advisors are responsible for advising students regarding degree requirements, it is the student who is ultimately responsible for choosing the correct courses and for following the correct program.*

## NEW COURSE INFORMATION FORM

**Course Identification: Replacement due to the combining of  
ERLA 600 Curriculum & Professional Development for Literacy Programs  
ERLA 609 Developing Literacy Leaders**

<b>Prefix:</b>	<b>Number</b>	<b>Title</b>
<b>ERLA</b>	<b>515</b>	<b>Leadership in K-12 Literacy Curriculum and Instruction</b>

### Course Description:

Identifies national and international literacy leaders in history, as well as the roles literacy leaders currently perform at the local, state, and national levels. Focuses on administrative/supervisory considerations related to planning, organizing, implementing, staffing, supervising, budgeting and evaluating literacy programs. Provides experience in grant writing and conducting an action research project at the local level. Includes technology and school or community application components.

### Course Outcomes:

- Identify literacy leaders and their work
- Define the roles of literacy leaders at/in multiple legislative levels
- Examine a model literacy program and trace its development
- Analyze the implementation and assessment practices of literacy programs
- Develop a literacy curriculum for a targeted educational setting
- Plan a professional development project that includes the selection of appropriate materials
- Identify key literacy trends and issues in relation to legislation, programs, funding and community
- Use educational strategies to incorporate community and professional leaders into literacy action
- Identify a literacy need and research related grant opportunities
- Analyze and evaluate, through an action research project, a real literacy issue

### Assessment Plan:

Conduct Interviews

- Three Burke Student Reading Interviews (1 Advanced, 1 Average, 1 Struggling Reader)
- One Reading Specialist/Reading Coach Interview
- One Principal Interview

Prepare a District Literacy Needs Assessment Plan

Evaluate Literacy Curriculum Materials

Prepare a Proposal for a Literacy Professional Development Workshop

Study a Literacy Issue through an Action Research Project

Research, Write, and Submit a Grant Proposal

### Course Outline including Time Allocations:

Historical and Theoretical Perspectives for Literacy (4 hours)

Best Practices in Literacy Instruction (6 hours)

Developing an Effective Reading Program (6 hours)

Pre-elementary

Elementary

Adolescent

**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 ERLA      b. Number 515      c. Enter Contact Hours per week in boxes.  
LECTure 3      LAB       INDEpendent Study – Check (x)

Practicum:       Seminar:

d. Course Title: Literacy Leadership C&I (Limit to 30 characters/spaces.)

e. College Code: ED      f. Department Code: SCED

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 equivalent courses? Check (x)  Yes     No

n. Equivalent courses: Prefix ERLA      Number 600 & 609

See instructions on Replacement courses.

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

Identifies national and international literacy leaders in history, as well as the roles literacy leaders currently perform at the local, state, and national levels. Focuses on administrative/supervisory considerations related to planning, organizing, implementing, staffing, supervising, budgeting, and evaluating literacy programs. Provides experience in grant writing and conduction an action research project at the local level. Includes technology and school or community application components.

p. Term(s) Offered:  (See instructions for listing.)      q. Max. Section Enrollment: 20

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

Graduate Status.

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 \_\_

**DELETE COURSE**  
**Course Data Entry Form**

**FORM F**

**Delete Course**  
**Rev. 7/23/07**

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

Note: Complete each section.

The course described below will be moved to inactive status.

ERLA 511 (renumbered ERLA 514) Literacy and Content Learning

a. Term Effective: Term  Year  See instructions.

**II. CURRENT COURSE TO BE DELETED FROM THE ACTIVE STATUS:**

Include the information that is in the current course database.

a. Course Prefix

b. Number

c. Enter Contact Hours per week in boxes.

LECTure  LAB  INDEpendent Study – Check (x)

Practicum:  Seminar:

d. Full Course Title:

UCC Chair Signature/Date:

\_\_\_\_\_ / /

Academic Affairs Approval Signature/Date:

\_\_\_\_\_ / /

**Office of the Registrar use ONLY**

Date Rec'd: \_\_\_ Date Completed: \_\_\_ Entered: SCACRSE \_\_\_ SCADETL \_\_\_ SCARRES \_\_\_ SCAPREQ \_\_\_

**DELETE COURSE**  
**Course Data Entry Form**

**FORM F**

**Delete Course**  
**Rev. 7/23/07**

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

Note: Complete each section.

The course described below will be moved to inactive status.

ERLA 600 Curriculum and Professional Development for Literacy Programs

a. Term Effective: Term  Year  See instructions.

**II. CURRENT COURSE TO BE DELETED FROM THE ACTIVE STATUS:**

Include the information that is in the current course database.

a. Course Prefix

b. Number

c. Enter Contact Hours per week in boxes.

LECture  LAB  INDependent Study – Check (x)

Practicum:  Seminar:

d. Full Course Title:

**UCC Chair Signature/Date:**

\_\_\_\_\_/\_\_\_\_/\_\_\_\_

**Academic Affairs Approval Signature/Date:**

\_\_\_\_\_/\_\_\_\_/\_\_\_\_

**Office of the Registrar use ONLY**

Date Rec'd: \_\_\_\_ Date Completed: \_\_\_\_ Entered: SCACRSE \_\_ SCADETL \_\_ SCARRES \_\_ SCAPREQ \_\_





**DELETE COURSE**  
Course Data Entry Form

**FORM F**

Delete Course  
Rev. 7/23/07

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

Note: Complete each section.

The course described below will be moved to inactive status.

ERLA 669                                      Literacy Research (Thesis)

a. Term Effective: Term  Year  See instructions.

**II. CURRENT COURSE TO BE DELETED FROM THE ACTIVE STATUS:**

Include the information that is in the current course database.

a. Course Prefix

b. Number

c. Enter Contact Hours per week in boxes.

LECture  LAB  INDEpendent Study – Check (x)

Practicum:  Seminar:

d. Full Course Title:

UCC Chair Signature/Date:

\_\_\_\_\_ / /

Academic Affairs Approval Signature/Date:

\_\_\_\_\_ / /

**Office of the Registrar use ONLY**

Date Rec'd: \_\_\_ Date Completed: \_\_\_ Entered: SCACRSE \_\_ SCADETL \_\_ SCARRES \_\_ SCAPREQ \_\_

**DELETE COURSE**  
**Course Data Entry Form**

**FORM F**

**Delete Course**  
**Rev. 7/23/07**

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

Note: Complete each section.

The course described below will be moved to inactive status.

a. Term Effective: Term  Year  See instructions.

**II. CURRENT COURSE TO BE DELETED FROM THE ACTIVE STATUS:**

EDUC                      570                      Teaching and Learning Theories in the Classroom

Include the information that is in the current course database.

a. Course Prefix  
**EDUC**

b. Number  
**570**

c. Enter Contact Hours per week in boxes.  
LECture       LAB       INDeendent Study – Check (x)   
Practicum:       Seminar:

d. Full Course Title: **Teaching and Learning Theories in the Classroom**

UCC Chair Signature/Date:

Academic Affairs Approval Signature/Date:

\_\_\_\_\_ / /

\_\_\_\_\_ / /

**Office of the Registrar use ONLY**

Date Rec'd: \_\_\_\_ Date Completed: \_\_\_\_ Entered: SCACRSE \_\_ SCADETL \_\_ SCARRES \_\_ SCAPREQ \_\_

**DELETE COURSE**  
Course Data Entry Form

**FORM F**

**Delete Course**  
**Rev. 7/23/07**

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

Note: Complete each section.

a. Term Effective: Term  Year  See instructions.

**II. CURRENT COURSE TO BE DELETED FROM THE ACTIVE STATUS:**

ERLA                    504                    Integrating the English Language Arts for Elementary/Middle School  
*This course represents the elimination of either/or choices (proposed deletion of ERLA 539 and ERLA 550) within the original program. Its objectives were compacted and combined with the following retained courses: ERLA 501, ERLA 511 [renumbered ERLA 514] and ERLA 550.*

Include the information that is in the current course database.

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

d. Full Course Title:

**UCC Chair Signature/Date:**

**Academic Affairs Approval Signature/Date:**

\_\_\_\_\_ / /

\_\_\_\_\_ / /

**Office of the Registrar use ONLY**

Date Rec'd: \_\_\_\_ Date Completed: \_\_\_\_ Entered: SCACRSE \_\_ SCADETL \_\_ SCARRES \_\_ SCAPREQ \_\_

**DELETE COURSE**  
Course Data Entry Form

**FORM F**

Delete Course  
Rev. 7/23/07

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

Note: Complete each section.

The course described below will be moved to inactive status.

a. Term Effective: Term  Year  See instructions.

**II. CURRENT COURSE TO BE DELETED FROM THE ACTIVE STATUS:**

ERLA                    507                    Literacy and Language Development for Young Children

*This course represents the elimination of an either/or choice (proposed deletion of ERLA 536) within the original program. Its objectives were compacted and combined with the following retained courses: ERLA 501 and ERLA 550.*

Include the information that is in the current course database.

a. Course Prefix

b. Number

c. Enter Contact Hours per week in boxes.

LECture  LAB  INDEpendent Study – Check (x)

Practicum:  Seminar:

d. Full Course Title:

UCC Chair Signature/Date:

\_\_\_\_\_ / /

Academic Affairs Approval Signature/Date:

\_\_\_\_\_ / /

**Office of the Registrar use ONLY**

Date Rec'd: \_\_\_ Date Completed: \_\_\_ Entered: SCACRSE \_\_ SCADETL \_\_ SCARRES \_\_ SCAPREQ \_\_

**DELETE COURSE**  
Course Data Entry Form

**FORM F**

**Delete Course**  
Rev. 7/23/07

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

Note: Complete each section.

The course described below will be moved to inactive status.

a. Term Effective: Term  Year  See instructions.

**II. CURRENT COURSE TO BE DELETED FROM THE ACTIVE STATUS:**

ERLA 522 Using Literature and Other Texts for Children and Adults

*This course represents the elimination of an either/or choice (proposed deletion of ERLA 511 [renumbered ERLA 514]) within the original program. Its objectives were compacted and combined with the following retained courses: ERLA 514 [originally ERLA 511], ERLA 516, and ERLA 550.*

Include the information that is in the current course database.

a. Course Prefix

b. Number

c. Enter Contact Hours per week in boxes.

LECTure  LAB  INDEpendent Study – Check (x)

Practicum:  Seminar:

d. Full Course Title:

**UCC Chair Signature/Date:**

\_\_\_\_\_/\_\_\_\_\_/\_\_\_\_

**Academic Affairs Approval Signature/Date:**

\_\_\_\_\_/\_\_\_\_\_/\_\_\_\_

**Office of the Registrar use ONLY**

Date Rec'd: \_\_\_\_ Date Completed: \_\_\_\_ Entered: SCACRSE \_\_ SCADETL \_\_ SCARRES \_\_ SCAPREQ \_\_

**DELETE COURSE**  
Course Data Entry Form

**FORM F**

**Delete Course**  
**Rev. 7/23/07**

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

Note: Complete each section.

The course described below will be moved to inactive status.

a. Term Effective: Term  Year  See instructions.

**II. CURRENT COURSE TO BE DELETED FROM THE ACTIVE STATUS:**

ERLA 536 Elementary and Middle School Reading Instruction

*This course represents the elimination of an either/or choice (along with the proposed deletion of ERLA 507) within the original program. Its objectives were compacted and combined with the following retained courses: ERLA 501, ERLA 511 [renumbered ERLA 514], ERLA 515, and ERLA 550.*

Include the information that is in the current course database.

a. Course Prefix

b. Number

c. Enter Contact Hours per week in boxes.

LECTure  LAB  INDEpendent Study – Check (x)

Practicum:  Seminar:

d. Full Course Title:

UCC Chair Signature/Date:

\_\_\_\_\_ / /

Academic Affairs Approval Signature/Date:

\_\_\_\_\_ / /

**Office of the Registrar use ONLY**

Date Rec'd: \_\_\_ Date Completed: \_\_\_ Entered: SCACRSE \_\_ SCADETL \_\_ SCARRES \_\_ SCAPREQ \_\_

**DELETE COURSE**  
Course Data Entry Form

**FORM F**

**Delete Course**  
**Rev. 7/23/07**

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

Note: Complete each section.

The course described below will be moved to inactive status.

a. Term Effective: Term  Year  See instructions.

**II. CURRENT COURSE TO BE DELETED FROM THE ACTIVE STATUS:**

ERLA 539 Integrating Reading, Writing, and Literature Across the Curriculum

*This course represents the elimination of an either/or choice (proposed deletion of ERLA 504) within the original program. Its objectives were compacted and combined with the following retained courses: ERLA 511 [renumbered ERLA 514] and ERLA 530.*

Include the information that is in the current course database.

a. Course Prefix

b. Number

c. Enter Contact Hours per week in boxes.

LECTure

LAB

INDEpendent Study – Check (x)

Practicum:

Seminar:

d. Full Course Title:

UCC Chair Signature/Date:

\_\_\_\_\_ / /

Academic Affairs Approval Signature/Date:

\_\_\_\_\_ / /

**Office of the Registrar use ONLY**

Date Rec'd: \_\_\_ Date Completed: \_\_\_ Entered: SCACRSE \_\_\_ SCADETL \_\_\_ SCARRES \_\_\_ SCAPREQ \_\_\_