

**MEMORANDUM**

**TO:** Debra Jackson, Institutional Effectiveness and Assessment  
Doris R. Helms, Vice President for Academic Affairs and Provost  
James F. Barker, President

**FROM:** Janice W. Murdoch, Chair, Undergraduate Curriculum Committee

**DATE:** April 25, 2013

**SUBJECT:** Administrative Approval of Curriculum Items

DEAN  
UNDERGRADUATE  
STUDIES

Clemson University  
E101 Martin Hall  
Box 345105  
Clemson, SC  
29634-5105

P 864-656-3942  
F 864-656-1363

---

The Undergraduate Curriculum Committee met on March 1, 2013 to approve the attached curriculum/course changes received in the Office of the Provost, April 25, 2013. The purpose of this memorandum is to respectfully request that you review this information and concur by giving final approval.

---

**APPROVED:**

 DATE 5/1/13  
DR. DEBRA JACKSON, INSTITUTIONAL EFFECTIVENESS AND ASSESSMENT

 DATE 5/8/13  
DR. DORIS HELMS, VICE PRESIDENT FOR ACADEMIC AFFAIRS & PROVOST

 DATE 5/8/13  
JAMES F. BARKER, PRESIDENT CLEMSON UNIVERSITY

/rjt

C: File

Attachments

**AGENDA**  
**University Undergraduate Curriculum Committee Meeting**  
**Friday—March 1, 2013—1:30 PM**  
**E304 Martin Hall**

- I. Call to order**
- II. Introductions**
- III. Consideration of February meeting minutes**
- IV. New Business**
  - A. Non-Credit to Credit Agreement - Barbara Speziale**
  - B. Committee Reports**
    - a. Arts & Humanities - Bruce Whisler**
    - b. Mathematical & Natural Sciences - Bob Green**
    - c. Social Science - Laura Olson**
    - d. Cross Cultural Awareness - Mike Coggeshall**
    - e. Science & Technology in Society - Pam Mack**
    - f. Ethical Judgment - Dan Wueste**
    - g. Critical Thinking - Sarah Winslow**
    - h. Communication - Michael LeMahieu**
- V. Curricula/course approvals - attached**
- VI. Other business**
- VII. Adjourn**

**Agreement to Award Academic Credit for Coursework Taken on a Non-Credit Basis Between Clemson University through its \_\_\_\_\_ Department and \_\_\_\_\_ College**

**Parties:** The parties to this Agreement are Clemson University (hereinafter Clemson) and \_\_\_\_\_ (hereinafter \_\_\_\_\_).

**Institution Offering Noncredit Courses:** \_\_\_\_\_

**Clemson University Programs Accepting Course Credit:** \_\_\_\_\_

**Effective Date:** This Agreement goes into effect on \_\_\_\_\_ (Insert Month, Date & Year)

**Relevance to University Mission:** This agreement is in keeping with the mission of Clemson University in that.....

**Terms:**

This Agreement defines the terms agreed to by the parties regarding the transfer of courses offered on a noncredit basis at \_\_\_\_\_ to Clemson University for academic credit, as listed in the Appendix A.

It is agreed that those individuals who complete these courses at \_\_\_\_\_ and meet all of the criteria listed below will receive credit for these courses in the Clemson University \_\_\_\_\_ degree program. This acceptance of course equivalencies constitutes the \_\_\_\_\_ Program (hereinafter "Program").

- I. Termination and/or Review Dates:** The term of this agreement is for \_\_\_\_\_ years and may be extended upon written agreement of all parties. Either party can terminate this agreement for any reason with a 6-month written notification to the other party. This Agreement will continue in effect until the term ends or it is terminated by either party. In the event of an early termination, the parties agree that they will honor any "Intent to Participate" forms signed by students prior to the notice of termination (Appendix B). No further "Intent to Participate" forms will be accepted after receipt of a notice of termination.
  
- II. Criteria:** The criteria that shall be met by students participating in this Program are as follows:
  - A. The student must be enrolled at \_\_\_\_\_ on or after the effective date of this Agreement.
  - B. Only students that apply to Clemson University and are admitted as enrolled students will be eligible for the academic course credit by Clemson.
  - C. The courses covered by this Agreement are attached hereto as Appendix A and incorporated herein by this reference.

- D. A grade of "B", or better, is required in all courses taken at \_\_\_\_\_ from this Program that are to be applied toward the Clemson bachelor's degree.
- E. Each student at \_\_\_\_\_ who intends to participate in this program must sign the "Intent to Participate" form before completing any one of the noncredit courses offered for Clemson credit at \_\_\_\_\_. A copy of the "Intent to Participate" form is attached hereto as Appendix B and incorporated herein by this reference.
- F. Students will receive course credit based on equivalencies stated in this Agreement. Students receive only credit – no grade is transferred to the Clemson transcript.
- G. This Agreement does not constitute any guarantee that students completing these course(s) at \_\_\_\_\_ will be admitted to Clemson University.

### III. Responsibilities of Parties:

- A. Both \_\_\_\_\_ and Clemson University agree to the following responsibilities:
  - 1. Both parties may inform potential students about the program. Examples of possible informational activities may include, but are not limited to brochures or fliers, information sessions for students etc.
  - 2. Both parties will appoint an individual to be responsible for coordinating the implementation of the Program.
  - 3. Courses covered by this agreement (Appendix A) may be added or subtracted through an addendum signed by all parties. Clemson may subtract any course from the list that it determines no longer meets equivalencies for its courses.
  - 4. Faculty at \_\_\_\_\_ will allow observation of instruction if requested by Clemson faculty.
- B. Clemson University through its \_\_\_\_\_ Department:
  - 1. Will accept all courses as outlined in Appendix A with a grade of "B" or better, for academic credit as part of the graduation requirements for the \_\_\_\_\_ Degree in the \_\_\_\_\_ Department unless a course has been removed because it no longer meets course equivalencies.
  - 2. Will conduct an annual review of all courses included on Appendix A to verify that course equivalencies are still valid.
- C. \_\_\_\_\_:
  - 3. Will provide evidence that the noncredit courses at \_\_\_\_\_ are equivalent to the Clemson courses, as described in Appendix A. The course equivalencies will be established and maintained as described below:
    - \_\_\_\_\_ will verify annually on or before June 1<sup>st</sup> that faculty teaching the courses at the noncredit institution,, have the

academic credentials required of faculty teaching the Clemson equivalent courses.

- \_\_\_\_\_ will provide Clemson with syllabi of the courses at the noncredit institution annually on or before June 1<sup>st</sup> so Clemson can verify they are aligned with the syllabi of the Clemson equivalent courses.
  - \_\_\_\_\_ will provide Clemson with a list of books and other teaching materials and facilities used in the courses at the noncredit institution annually on or before June 1<sup>st</sup> to verify they meet the equivalencies for the Clemson courses.
4. Understands and agrees that any new courses it wishes to add to Appendix A must first be approved by the Clemson University college curriculum committee.

IV. General Terms:

- A. This Agreement will be construed in accordance with the laws of the State of South Carolina. The venue for any legal dispute arising out of this Agreement will be a state or federal court within the state of South Carolina.

**Signatures:** The signatures of the authorized representatives identified below indicate agreement to the terms set forth herein.



\_\_\_\_\_  
President  
Clemson University

\_\_\_\_\_  
Senior official (title)  
\_\_\_\_\_  
(institution)



\_\_\_\_\_  
Provost and Vice President  
For Academic Affairs  
Clemson University

\_\_\_\_\_  
Department Chair or other on-site  
contact, title  
Point of Contact: Physical Address

\_\_\_\_\_  
Dean  
College of \_\_\_\_\_

\_\_\_\_\_  
Department Chair,  
Clemson University  
Point of Contact: Physical Address

\_\_\_\_\_  
DATE OF LAST SIGNATURE

Appendix A--SAMPLE

(Should include a list of required courses to be taken at the noncredit institution and Clemson course equivalencies -see example below; syllabi of both should be retained by the department.)

Clemson University Department of _____			
Noncredit Course	Criteria for Credit	Clemson University Course	Status
Architecture Design Studio I	Grade of B or above	ARCH 101 (3 credits) Introduction to Architecture	
Architecture Design Studio II	Grade of B or above	ARCH 151 (5 credits) Architecture Communications	

**Appendix B**

**Intention to Participate in the \_\_\_\_\_ Program Form  
(Enroll in Courses Taken on a Non-Credit Basis at \_\_\_\_\_  
for Clemson University Academic Credit)**

In signing this document the student, \_\_\_\_\_, who is enrolled at \_\_\_\_\_ (institution) and this student's parent or guardian, \_\_\_\_\_, indicate the intention of the student to participate in the \_\_\_\_\_ Program (hereinafter "Program") and understand the following requirements of the Program :

- a. The student must be enrolled at \_\_\_\_\_ on or after \_\_\_\_\_.
- b. Only students that apply to Clemson University and are admitted as enrolled students will be eligible for academic course credit.
- c. \_\_\_\_\_
- d. Student will enroll in \_\_\_\_\_ course(s) at \_\_\_\_\_ with the intent of receiving academic credit for the Clemson University course(s) \_\_\_\_\_ in the department of \_\_\_\_\_.
- e. A grade of "B", or better, is required in all courses from this Program that are to be applied toward the Clemson bachelor's degree.
- f. Students will receive course credit only – no grade is transferred to the Clemson transcript.
- g. Signing this form does not constitute any guarantee that students completing these course(s) at \_\_\_\_\_ will be admitted to Clemson University.

\_\_\_\_\_  
Student Signature

\_\_\_\_\_  
Parent or Guardian Signature

Date Signed \_\_\_\_\_

\_\_\_\_\_  
Department Chair or other on-site contact, title

Date Signed \_\_\_\_\_

## Rhonda Todd

---

**From:** Janice Murdoch  
**Sent:** Monday, February 18, 2013 8:11 AM  
**To:** Rhonda Todd  
**Subject:** FW: noncredit to credit

For next UCC

**From:** Debra Jackson  
**Sent:** Monday, February 18, 2013 7:52 AM  
**To:** Barbara Speziale  
**Cc:** Renee Roux; Janice Murdoch  
**Subject:** RE: noncredit to credit

Thanks for the clarification. However, I do believe the UCC should discuss the noncredit to credit issue and perhaps agree on the guidelines you propose within the agreement. This is particularly important given the nature of the discussions about approving more and more noncredit high school programs for college credit. It seems like an appropriate discussion, even though there may not be a "policy" developed. However, given the importance of the issue in SACSCOC principles and our two non-compliance areas, a policy seems very appropriate to me.

Thanks.

*Debbie*



Debra B. Jackson, Ph.D.  
Vice-Provost for Academic Affairs  
and Asst. to the President  
302 Sikes Hall  
Clemson, SC 29634-5155  
P 864/656-4592  
F 864/656-0163  
[www.clemson.edu/assessment](http://www.clemson.edu/assessment)

**From:** Barbara Speziale  
**Sent:** Sunday, February 17, 2013 7:16 PM  
**To:** Debra Jackson  
**Cc:** Renee Roux; Janice Murdoch  
**Subject:** Re: noncredit to credit

Debbie,



There are several, sequential, versions of the document. You have all of them, some undated. The correct one is attached—this one includes the 'mission statement relevance' section (in red) that you requested.

This is the version that Renee produced last week plus my added mission statement section. This is the one we would like to use as a starting point for discussions with the noncredit entities. I used this version (with the references to the Fine Arts Center removed and prior to the mission statement insertion) in a discussion on Thursday with the GSSM re their proposed Accelerate program.

The term of the agreement is for 5 years and requires annual verification of the courses. Renee inserted useful language regarding the terms of the agreement and the obligations of the parties. You are correct in that the departments have the responsibility to work with the non-credit entities to verify that the noncredit courses are worthy of substitution for Clemson courses. I believe that the agreement as it is now has the appropriate guidance and safeguards.

RE your question about the UCC, this (noncredit to credit ) issue was not the topic we proposed to present to that group. The noncredit to credit issue is being handled on a department level, with permissions required by the relevant college curriculum committees.

The issue to be presented to the UCC is that of accepting a few, designated Tech School 200 level courses to substitute for Clemson level 300 level courses. This substitution is being requested only for a few CAFLS courses. It is being discussed in the affected depts now. It will go to the CAFLS curriculum committee in March and the UCC in April

--

Barbara J. Speziale  
Associate Dean, Undergraduate Studies  
Professor, Biological Sciences Director, HHMI SC LIFE Project  
E201 Martin Hall, Clemson University, Clemson, SC USA 29634  
Phone: 864-656-1550 Fax: 864-656-1480 Email: [bjspz@clemson.edu](mailto:bjspz@clemson.edu)  
CREATIVE INQUIRY: [www.clemson.edu/ci](http://www.clemson.edu/ci)  
SC LIFE: [www.clemson.edu/sclife](http://www.clemson.edu/sclife)  
FIRST : [www.clemson.edu/first](http://www.clemson.edu/first)

**From:** Deborah Jackson <[dbj@clemson.edu](mailto:dbj@clemson.edu)>  
**Date:** Sun, 17 Feb 2013 16:41:11 -0500  
**To:** Barbara Speziale <[bjspz@clemson.edu](mailto:bjspz@clemson.edu)>  
**Cc:** Janice Murdoch <[JANW@clemson.edu](mailto:JANW@clemson.edu)>, Jeffrey Appling <[JAPPLIN@clemson.edu](mailto:JAPPLIN@clemson.edu)>  
**Subject:** noncredit to credit

Barbara, I found another document that included all of this, and now I'm confused as to which of these sets of information you are recommending, and of course, the process for approval. In italics or not?

Comments from Barbara S. on Fine Arts:

*The Clemson department that initiates the agreement is responsible for providing evidence that a course at a non-credit institution is equivalent to a designated Clemson University course. The course equivalency must be approved by the college curriculum committee.*

*This evidence must include:*

- 1. The faculty teaching the course at the non-credit institution must have academic credentials equal to those required of faculty teaching the designated Clemson equivalent course.*
- 2. The syllabus of the course at the non-credit institution must be aligned with the syllabus of the designated Clemson equivalent course, and approved by the Clemson faculty that teach the designated Clemson equivalent course.*
- 3. The books and other teaching materials used in the course at the non-credit institution must be approved by the Clemson faculty that teach the designated Clemson equivalent course.*

## **Liberal Education and America's Promise (LEAP)**

### **Essential Learning Outcomes**

The LEAP campaign is organized around a robust set of "Essential Learning Outcomes" (pdf) -- all of which are best developed by a contemporary liberal education. Described in College Learning for the New Global Century (pdf), these essential learning outcomes and a set of "Principles of Excellence" (pdf) provide a new framework to guide students' cumulative progress through college.

Through its VALUE Initiative, AAC&U has developed a set of rubrics to assess many of the following learning outcomes. Beginning in school, and continuing at successively higher levels across their college studies, students should prepare for twenty-first-century challenges by gaining:

### **Knowledge of Human Cultures and the Physical and Natural World**

- Through study in the sciences and mathematics, social sciences, humanities, histories, languages, and the arts

*Focused* by engagement with big questions, both contemporary and enduring

### **Intellectual and Practical Skills, Including**

- Inquiry and analysis
- Critical and creative thinking
- Written and oral communication
- Quantitative literacy
- Information literacy
- Teamwork and problem solving

*Practiced extensively*, across the curriculum, in the context of progressively more challenging problems, projects, and standards for performance

### **Personal and Social Responsibility, Including**

- Civic knowledge and engagement—local and global
- Intercultural knowledge and competence
- Ethical reasoning and action
- Foundations and skills for lifelong learning

*Anchored* through active involvement with diverse communities and real-world challenges

### **Integrative and Applied Learning, Including**

- Synthesis and advanced accomplishment across general and specialized studies

*Demonstrated* through the application of knowledge, skills, and responsibilities to new settings and complex problems

University Undergraduate Curriculum Committee  
Minutes Meeting  
E304 Martin Hall  
February 1, 2013, 1:30 PM

**Members Present:** Jan Murdoch, chair; Cameron Bushnell for Michael Silvestri; Eric Touya; Mike Coggeshall; Angela Morgan; Bob Kosinski; Mary Beth Kurz; Cheryl Ingram-Smith; Brian Dominy; Bob Horton; Roxanne Amerson; Chris Colthorpe; Perry Austin; Jeffrey Appling; Cecelia Hamby; Shannon Clark; Mary Huff; Pam Mack; David Knox; Emily Rose Gray; and Rhonda Todd

Murdoch convened the meeting at 1:30 PM

**Approval of minutes**

The committee approved the December and January meeting minutes.

**New Business**

- A. General Education Revision Task Force** – Austin stated that he had planned to give a subcommittee report at the December meeting, but due to the issues concerning General Education, he decided to postpone his full report. He reported that the subcommittee had met to discuss ways to improve the General Education experience for all students. He recommended implementing an Academic Core (report is attached) and removing Professional Development as it would be accomplished within the Academic Core. The Core Curriculum would satisfy the SACS requirements, introduce a new competency entitled Leadership Development, propose changes to the Cross Cultural Awareness competency and make Critical Thinking larger in the Academic Core with the implementation of QEP. Murdoch stated this recommendation by students should be a good starting place as we begin discussions to revise General Education.
- B. Committee reports**
- a. Arts & Humanities – Bruce Whisler  
The subcommittee recommended the approval of CU260 for Arts and Humanities Non-Literature. The committee approved.
  - b. Mathematical & Natural Sciences – Bob Green
  - c. Social Science – Laura Olson
  - d. Cross Cultural Awareness – Mike Coggeshall
  - e. Science & Technology in Society – Pam Mack
  - f. Ethical Judgment – Dan Wueste
  - g. Critical Thinking – Sarah Winslow
  - h. Communication – Michael LeMahieu
- C. Curriculum/course approval** – See attached. Items in grey were not approved.

**Other Business**

Adjourned 2:38 PM

Minutes respectfully submitted by Rhonda Todd.

**What is General Education?**

The task force believes that general education is a collection of appropriate curricula that represents knowledge that every student should acquire throughout his or her undergraduate career at Clemson University. We also feel that the general education curriculum should represent a logical flow of ideas and prepare students to be effective world citizens.

**What is the purpose of the task force?**

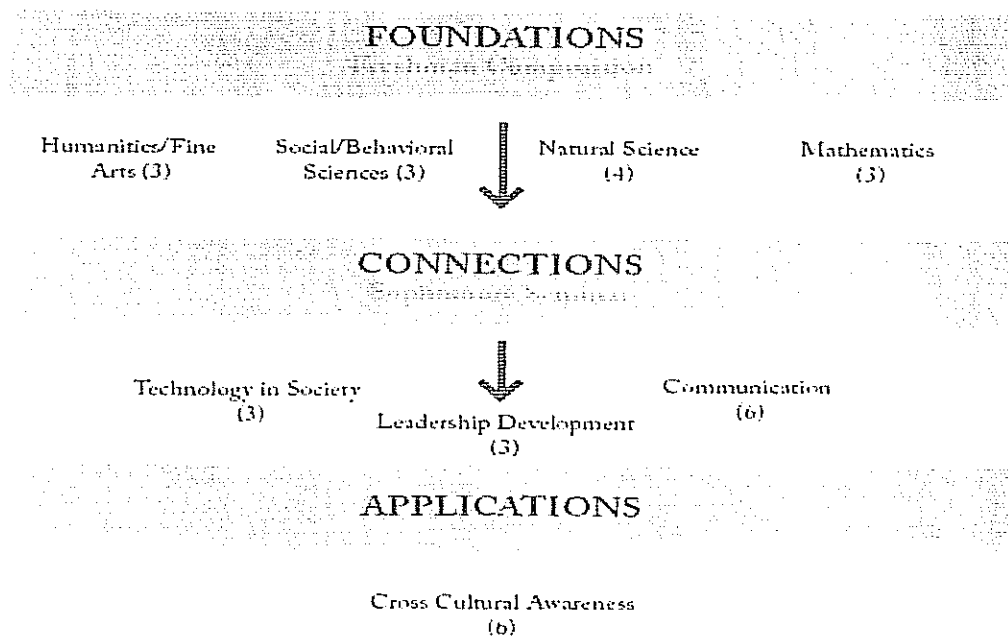
In light of recent developments with the Quality Enhancement Plan (QEP) and issues surrounding the ePortfolio, Clemson Undergraduate Student Government felt that our current general education curriculum needed to be revisited. The Academic Affairs Chair tasked the Academic Advisory Board with the project of proposing reforms to the general education curriculum. The Academic Advisory Board housed within Student Senate consists of the two senators from each college who received the most votes in the student body election, creating a board that is truly representative of students across campus.

**What is not being accomplished by the current curriculum?**

Members of the task force expressed concerns that the offerings of the current curriculum lack a general structure in that courses can be taken at any point during the undergraduate career. We believe that the current structure of the general education program and the execution and makeup of existing courses provide little value added to the Undergraduate educational experience. We also felt that the relationship between competencies and courses is unclear in that what is required as part of the curriculum should be explicitly stated via the competencies.

**Our proposal: An academic core**

In order to incorporate continuity within the general education curriculum, the task force felt that a general education program core would mitigate the problem of a curriculum that is representative of the silo effect—"towers" of courses that are unrelated and disjointed in nature. We also felt that the current listing of competencies could logically follow a three-step process: fundamentals, connections, and applications. A general education core would represent an appropriate shift in students' perception of general education. We also recognize that the proposed general education core would be only part of a larger academic core. The below diagram outlines our proposal:



### Competencies

Our proposal represents a philosophical shift in that competencies directly match requirements. As a result, distributed competencies will no longer exist. The academic core would allow all competencies to logically flow and match existing or proposed courses or series of courses.

### Fundamentals

*These competencies represent the fundamentals of the academic experience. The task force is not proposing changes to these requirements, as they are required by Southern Association of Colleges and Schools (SACS), and no further revision was necessary.*

- Humanities/Fine Arts (3)
- Social/Behavioral Sciences (3)
- Natural Sciences (4)
- Mathematics (3)

### Connections

*At this stage in the academic career, students will be able to draw conclusions based on the skills they will acquire in the fundamentals component of the general education core. The "Technology in Society" competency will replace "Science and Technology in Society." The "Communication" competency will consist of both freshman composition and an additional communication course.*

- Communication (6)
- Technology in Society (3)
- Leadership Development (3)

### Applications

*At the final stage of the academic career, students will be able to connect the theoretical skills that they have acquired and apply them to practical circumstances. Students will also apply the aforementioned skills to gain further knowledge about the world as a whole, effectively preparing them to be well versed in both a practical and theoretical sense.*

- Cross-Cultural Awareness (6)

### The proposed core curriculum will:

- Satisfy the SACS requirement of 30 hours and should not propose a challenge in terms of staffing or funding.
- Introduce a new competency called "Leadership Development" that will prepare students to be leaders in any arena of life. Courses will approach the study of leadership in a theoretical and intellectual manner and from historical, philosophical, sociological, and political perspectives.
- Propose significant changes to the "Cross-Cultural Awareness" competency. Courses involving emerging world cultures and markets would be beneficial to the educational experience. Because many students have trouble satisfying this competency, we feel that the upper-level humanities courses that explore these topics should be open to all students.
- Remove the science component of the "Science and Technology in Society" competency. We felt that students will attain sufficient scientific knowledge from the required "Natural Sciences" competency. "Technology in Society" allows more flexibility, as students would apply practical technological skills to a broader technological understanding of the world.
- Relocate the "Critical Thinking" competency to the larger academic core, as this competency will be satisfied upon the university's installation of the QEP.

### In order to implement the academic core, our proposal will:

- Remove "Academic and Professional Development" from the general education core as the skills gained by this competency will be accomplished via the larger academic core.
- Remove "Ethical Judgment" from the list of competencies. We felt that it is important for all students to be ethical thinkers, but it is not necessary for students to prove as an educational outcome.

Agenda Courses/Curricula  
February 1, 2013  
University Undergraduate Curriculum Committee

I. College of Architecture, Arts and Humanities

A. Languages

ARAB 100	Intro to Arabic - new course	3(3,0)	1
FR 306	Intensive Language and Culture in Belgium - new course	3(3,0)	3

II. College of Health, Education, and Human Development

A. Education

ED SP 371	Char Mild HDCP - delete course		5
-----------	--------------------------------	--	---

Approved Courses/Curricula  
 March 1, 2013  
 University Undergraduate Curriculum Committee

<b>I. Miscellaneous</b>			
<b>A. Academic Success Center</b>			
<b>CU 120</b>	Introduction to Career Development - new course	3(3,0)	<b>1</b>
<b>B. General Education</b>			
<b>STS 215</b>	Critical Approach to Global Challenge of Technological Revolutions	3(3,0)	<b>4</b>
<b>II. College of Agriculture, Forestry and Life Sciences</b>			
<b>A. Soils and Sustainable Crops</b>			
	Proposed Curriculum Changes to Soils and Sustainable Crops		<b>13</b>
<b>B. Microbiology</b>			
<b>MICRO 405</b>	Advanced Microbial Ecology - new course	3(3,0)	<b>15</b>
<b>C. Biological Sciences</b>			
<b>BIOL 121</b>	Key to Human Identity - delete course		<b>18</b>
<b>BIOL 124</b>	Keys to Reproduction - delete course		<b>19</b>
<b>D. Agricultural Education</b>			
	Agricultural Education - change major curriculum requirements		<b>20</b>
<b>E. Forest Resource Management</b>			
	Forest Resource Mgmt. - change major curriculum requirements		<b>23</b>
<b>F. Wildlife and Fisheries Biology</b>			
	Wildlife and Fisheries - change major curriculum requirements		<b>26</b>
<b>III. College of Engineering and Science</b>			
<b>A. Chemistry</b>			
<b>CH 201</b>	Memo to change from 4 credit (3,3) lecture/lab course		<b>28</b>
<b>B. Environmental Engineering and Earth Science</b>			
	Change minor requirements		<b>29</b>
<b>EES 450</b>	Professional Development - change course modifier	1(1,0)	<b>30</b>
<b>GEOL 415/615</b>	Analysis Geo Process - change credit	4(3,3)	<b>32</b>
<b>GEOL 408/H/608</b>	Geohydrology - change catalog title/description, prerequisites, crosslisting, number 682	3(3,0)	<b>34</b>
<b>C. Mathematical Sciences</b>			
<b>MTHSC 319</b>	Introduction to Proof - new course	3(3,0)	<b>36</b>
<b>D. Mechanical Engineering</b>			
<b>ME 417/H/617</b>	Mechatronic System - change method	3(2,3)	<b>38</b>
<b>E. Physics &amp; Astronomy</b>			
<b>PHYS 475</b>	Selected Topic - change method, credit	1-3	<b>40</b>