MEMORANDUM

TO: Debra Jackson, Institutional Effectiveness and Assessment  
Robert Jones, Vice President for Academic Affairs and Provost

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

DATE: June 25, 2015

SUBJECT: Administrative Approval of Curriculum Items

The Undergraduate Curriculum Committee met on May 1, 2015 to approve the attached curriculum/course changes received in the Office of the Provost, June 25, 2015. The purpose of this memorandum is to respectfully request that you review this information and concur by giving final signature approval.

APPROVED:

Debra J. Jackson  DATE 6/30/15
DR. DEBRA JACKSON, INSTITUTIONAL EFFECTIVENESS AND ASSESSMENT

Robert J. Jones  DATE 7/9/15
DR. ROBERT JONES, VICE PRESIDENT FOR ACADEMIC AFFAIRS & PROVOST

/rft

C: File

Attachments
AGENDA

University Undergraduate Curriculum Committee Meeting
Friday—May 1, 2015 —1:30 PM
E304 Martin Hall

I. Call to order

II. Introductions

III. Consideration of April meeting minutes

IV. New Business

V. Old Business
   A. Course and Curriculum Change System – Appling
   B. Update General Education Assessment - Ring

VI. Committee reports
   A. Arts & Humanities – Bruce Whisler
   B. Mathematical & Natural Sciences – Bob Kosinski
   C. Social Science – Laura Olsen
   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 – Cameron Bushnell

VI. Curricula/course approvals - attached

VII. Other business

VIII. Adjourn
General Education Assessment Pilot
Executive Summary

The primary purpose of this study was to review the suggested plan for the assessment of General Education particularly related to collecting evidence, faculty time involved, and the technology used to facilitate this activity. We met monthly either as a group, brown-bag lunches, or one-on-one consultations to monitor the project and document the procedure. Participants were provided professional developments funds and were encouraged to take part in the 2015 Summer Assessment. Of the 15 participants, 12 will participate in the 2015 Summer Assessment institute.

Fifteen faculty members participated in the pilot: 7 from AAH, 2 from BBS, 2 from CAFLS, and 3 from CES. Sample courses from all course-related competencies (AH, CC, M, NS, SS, STS) were included in the study. Thirteen courses, some with multiple sections, were included in the study generating 1569 artifacts as presented in the table below. Overall, the submission rate was 89%.

The following methods of uploading artifacts were tested by participants:
- Faculty batch uploads
- Student upload with in-class support from Gail Ring or Bob Brackett
- Student upload with in-class support from the professor
University Undergraduate Curriculum Committee
Minutes Meeting
E304 Martin Hall
April 3, 2015, 1:30 PM

Members Present: Jan Murdoch, chair; Joe Mazer, Mike Coggeshall; Angela Morgan; Bob Kosinski; Michael Sehorn; Mary Beth Kurz; Brian Dominy; Andy Tymins; Hugh Spitler; John Whitcomb; Jan Comfort; Cecelia Hamby; Shannon Clark; Pam Mack; David Knox; Penny Brunner; Jeff Appling; Gail Ring and Rhonda Todd

Guests: Kristin Goodenow

Murdoch convened the meeting at 1:31 PM

Introductions
Murdoch welcomed the committee.

Approval of minutes
The committee approved the March meeting minutes.

Old Business

A. General Education Assessment – Ring reported that the new system is in place for uploading artifacts. She stated that several faculty members have used the new system without complication. Kosinski stated that he plans to have his laboratory teaching assistants put their students’ papers on one computer, and then he will batch upload from there. He asked if it was a problem that the students’ names will be on the papers. Ring stated that this should not be a problem since artifacts are chosen at random, and work is not related to an individual student. Ring reported that she currently has eight volunteers for summer assessment. Committee members discussed continuing the process in the fall semester, but members agreed that much would depend on the outcome of the summer assessment.

New Business

B. Secondary Ed Double Major Issue – Hamby explained there are issues with several double major degrees where many of the courses listed are not satisfying the General Education requirement. She stated that this requires an individual substitution for every student. Hamby reported that Stacy Marcus has tried to work with the college to resolve with a blanket substitution, but she was unable to reach an agreement. Goodenow stated that all double majors have this issue with the exception of Math and Biology. Dominy stated that Gowdy plans to work with School of Ed to resolve issues, but the major concern for the college is course equivalency. Murdoch stated that curriculum maps need to change to address any issues for graduating students.

B. Statement added to Undergraduate Announcements – Murdoch reported that as a matter of information she wanted to share the following statement that has been added to the Undergraduate Announcements:

Under the GRADUATION REQUIREMENTS heading, in the catalog: A student may specify up to two completed majors, two minors, and if applicable, two concentration/emphasis areas per degree when applying for graduation. Second (double) majors and additional fields of study will not be retroactively added to a student’s record once the degree is conferred.
C. Committee Reports
   a. Arts & Humanities – Bruce Whisler
   b. Mathematical & Natural Sciences – Bob Kosinski
   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 – Cameron Bushnell

D. Curriculum/course approval – See attached

Other Business

Hamby reported that Cindy Cope had sent an email to deans and associate deans about using a different system for grade corrections to be used in the future. Members of the committee had not seen the email, so Todd agreed to forward the email to the committee following the meeting.

Murdoch reported that SACS recently found out that Clemson gives credit to some GSSM courses, and have expressed concern, so we will be evaluating the process to determine if this needs to stop.

The meeting adjourned at 3:15 PM.

Minutes respectfully submitted by Rhonda Todd
Rhonda Todd

From: Cecelia Hamby
Sent: Wednesday, April 01, 2015 4:17 PM
To: Rhonda Todd; Janice Murdoch
Cc: Debra Sparacino
Subject: FW: Sec Ed English double majors
Attachments: Blanket Substitutions - Chemistry.docx

Rhonda,

In the catalog it states that students majoring in Science Teaching Chemistry, Biology, or Physics can receive a double major in BA/Chemistry, Biology, or Physics. However, there are some issues with the double major in Chemistry and Physics where students are missing several requirements. In the past individual substitutions were processed for students graduating, but in order to streamline the substitutions the College of Education has prepared a blanket waiver to cover these deficiencies. Attached is a draft copy of waiver that was prepared by Stacy Marcus for the College of Education. It appears that the waiver has gotten to a certain point and stopped. Please the email that was received today from Stacy Marcus regarding the status of the waiver. The College is also working on revising their curriculum map to footnote these approved substitutions.

We currently have three students in Science Teaching Chemistry who are registered as a double major and will not be allowed to graduate as a double major if these issues cannot be resolved. I have discussed these issues with Debra and she stated that we needed to bring this to the curriculum committee on Friday.

Cecelia S. Hamby
Academic Records Counselor
104 Sikes Hall
Clemson SC 29634
864-656-2174
Enrolled Student Services  
Records and Registration  
102 Sikes Hall  
Clemson University  
Clemson, SC 29634

To Whom It May Concern:

For students to receive the Bachelor of Arts double major in Science Teaching: Chemistry and Chemistry, the following courses may substitute for Chemistry BA requirements:

- **CH 3300 Introduction Physical Chemistry** may be substituted for the **CH 3310 Physical Chemistry**
  - Rationale: While the approach of the two courses differs in regard to the level of mathematical rigor, the content of the two courses (thermodynamics and chemical kinetics) is very similar. CH 3300 is appropriate for students advancing toward a Science Teaching: Chemistry Bachelor of Arts degree

- **EDSC 3270 Practicum in Secondary Science** may be substituted for ENGL 3140 Technical Writing
  - Rationale: EDSC requires students to observe and reflect on techniques employed by secondary school instructors to teach science. The writing required in this course is technical in the field of study of science teaching majors

- **EDSC 4470 Teaching Internship in Secondary Science** may be substituted for the 6 hour Chemistry requirement
  - Rationale: Students are required to create and teach chemistry lessons in an assigned public school science classroom

- **EDF 3010 Principles of American Education**, **EDF 3020 Educational Psychology**, and **EDLT 4980** may substitute for the 9 hour Chemistry arts and humanities/social science requirement
  - Rationale: students need 9 hours of courses unrelated to the sciences and these courses fill the requirement

- **PHYS 2220 Physics with Calculus III** may be substituted for the **CH 3320 Physical Chemistry**
  - Rationale: Both courses discuss quantum mechanics

- The science teaching statistics requirement may be substituted for the **MATH 2060 Calculus of Several Variables** requirement
  - Rationale: Students in Science Teaching are not required to take MATH 2060, however are required to take an upper level statistics course to meet the third math requirement in Chemistry

- If students do not have enough hours from excess electives, **EDSP 3700 and EDSC 4270** may fill these hours
Happy Friday, Ladies,
I would like to submit the following statement to be inserted in the 1516 undergraduate announcements.

Under the GRADUATION REQUIREMENTS heading, in the catalog:
A student may specify up to two completed majors, two minors, and if applicable, two concentration/emphasis areas per degree when applying for graduation. Second (double) majors and additional fields of study will not be retroactively added to a student's record once the degree is conferred.

What is my next step?

LeDon M Wilson
Academic Records Counselor
iRoar Implementation Team
E-207 Martin Hall
Clemson University
Clemson, SC 29631-5125
864-656-2306
Jmwils@clemson.edu
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<td>ENGL 3540</td>
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<td>Introduction to Leadership Laboratory</td>
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<td>BIOL 4920</td>
<td>Internship in Biological Science</td>
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<td>MICR 3050</td>
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<td>MICR 4030/6030</td>
<td>Marine Microbiology</td>
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<td>MICR 4950</td>
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<td>MICR 4920</td>
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**Items in gray are tabled and not approved at this meeting.**
### I. College of Architecture, Arts and Humanities

#### A. Department of Art
- **ART 2050** Beg Life Drawing - change
  - Art Minor
  - 1
- **ART 2050** Art Minor
  - 3

#### B. Department of English
- Creative Writing Minor
  - 5
- **ENGL 4220/6220** Topics in Writing Poetry - new course
  - 3(3,0)
  - 6
- **ENGL 4230/6230** Topics in Writing Fiction - new course
  - 3(3,0)
  - 8
- **ENGL 3540** Literature of the Middle East and North Africa - new
  - 3(3,0)
  - 10

### II. College of Agriculture, Forestry and Life Sciences

#### A. Department of Animal and Vet Sciences
- **AVS 2020** CAFLS Plus Lecture
  - 3(2,0)
  - 13
- **AVS 2021** CAFLS Plus Lab
  - 0(2,0)
  - 19

#### B. Department of Biochemistry
- **BCHM 3010** Molecular Biochem - change prerequisites
  - 25
- **BCHM 3050** Essen Elements Bioch - change prerequisites
  - 27
- **MICR 4501** Adv Micro Lab I - change objectives, outline
  - 3(3,0)
  - 29
- **MICR 4511** Adv Micro Lab II - change objectives, outline
  - 3(3,0)
  - 32
- **MICR 4521** Adv Micro Lab III - change objective, outline
  - 3(3,0)
  - 35
- **GEN 3010** Fundaement Gen Lab - delete course
  - 38
- **BCHM 3060** Essen Elem Bio Lab - delete course
  - 40
- **GEN 3030** Molec & General Genetics lab - delete course
  - 42
- **BCHM 3020** Molec Bioch Lab - delete course
  - 44
- **BCHM 4910** Dir Research Biochemistry - change modifier, catalog description
  - 46
- **GEN 4910** Dir Res in Genetics - change modifier, catalog description
  - 48

#### C. Department of Food Science
- **FDSC 2020** Man and His Food - change method, credit, descr, prerequisite
  - 3(2,3)
  - 50
- **FDSC 2011** Introduction to Food Laboratory - new course
  - 0(0,3)
  - 53
- **NUTR 2160** Evidence Based Nutrition - change
  - 55
- **NUTR 3010** Food and Culture - new course
  - 3(3,0)
  - 57
- **NUTR 3020** Nutrition Assessment - new course
  - 4(3,0)
  - 60
- **NUTR 3021** Nutrition Assessment Lab - new course
  - 3(3,0)
  - 62
- **FDSC 4070/6070** Quantity Food Production - change
  - 64
- **FDSC 4071/6071** Quantity Food Production Lab - change
  - 67
- **NUTR 4270** Nutrition Counseling - change
  - 70
- **NUTR 4510/6510** Human Nutrition - change title, descr, prerequisite
  - 3(3,0)
  - 73
- **NUTR 4550/6550** Nutr Metabolism - change title, descr, prerequisite
  - 3(3,0)
  - 75
- **BS Food Science - change major**
  - 77
- **BS Nutrition and Dietetics - change major**
  - 80
- **Overview of Nutrition Curriculum**
  - 86

### III. School of Education

#### A. Elementary Education
- **EDEL 4510** Elem Methods in Science Tchg. - change prerequisite
  - 87
- **EDEL 4870** Ele Meth Social Studies - change prerequisite
  - 89
- **EDSP 4900** Teaching Writing to Students with Disabilities
  - 91
- **EDLT 4800** Foundations in Adolescent Literacy - new course
  - 94

### IV. College of Business and Behavioral Science

#### A. Economics
- **ECON 4050/6050** Intro to Econometrics - change prerequisites
  - 4(3,3)
  - 97

### V. College of Engineering and Science

#### A. Bioengineering
- **BIOE 4510** Creative Inquiry Bioengineering- change catalog description
  - 1-6
  - 99
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<td>BIOE 4910</td>
<td>Research in Bioengineering- change catalog description</td>
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<td>101</td>
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<tr>
<td>CH 4360/6360</td>
<td>Computational Quantum Chemistry- new course</td>
<td>3(3,0)</td>
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<tr>
<td>BE 4150/6150</td>
<td>Biosystems Engineering- change credit and prerequisite</td>
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**D. General Engineering**

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<td>ENGR 1000</td>
<td>Major Discovery Seminar- new course</td>
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<tr>
<td>ENGR 1060</td>
<td>Engineering Discipline and Skills II- change prerequisite</td>
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<td>ENGR 1070</td>
<td>Programming and Problem Solving I- change prerequisite</td>
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<td>ENGR 1080</td>
<td>Programming and Problem Solving II- change prerequisite</td>
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<td>ENGR 1090</td>
<td>Prog/Problem Solving Apps- change prerequisite</td>
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<tr>
<td>ENGR 1490</td>
<td>Introduction to Engineering- change prerequisite</td>
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<tr>
<td>ENGR 1510</td>
<td>Engineering Skills- change prerequisite</td>
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<td>ENGR 1520</td>
<td>Engineering Computer Skills- change prerequisite</td>
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<td>ENGR 1530</td>
<td>Engineering Foundation Skills- change prerequisite</td>
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<tr>
<td>ENGR 1640</td>
<td>Summer MATLAB Programming- change prerequisite</td>
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**E. Industrial Engineering**

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<td>IE 4810/6810</td>
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**F. Math Sciences**

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<td>STAT 4020</td>
<td>Introduction to Statistical Computing- change prerequisite</td>
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**G. Mechanical Engineering**

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<td>Senior Seminar- change prerequisite</td>
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<td>ME 4580/6580</td>
<td>Additive Manufacturing- new course</td>
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