

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

DEAN  
UNDERGRADUATE  
STUDIES

Clemson University  
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Clemson, SC  
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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.

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**APPROVED:**

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

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

/rft

C: File

Attachments

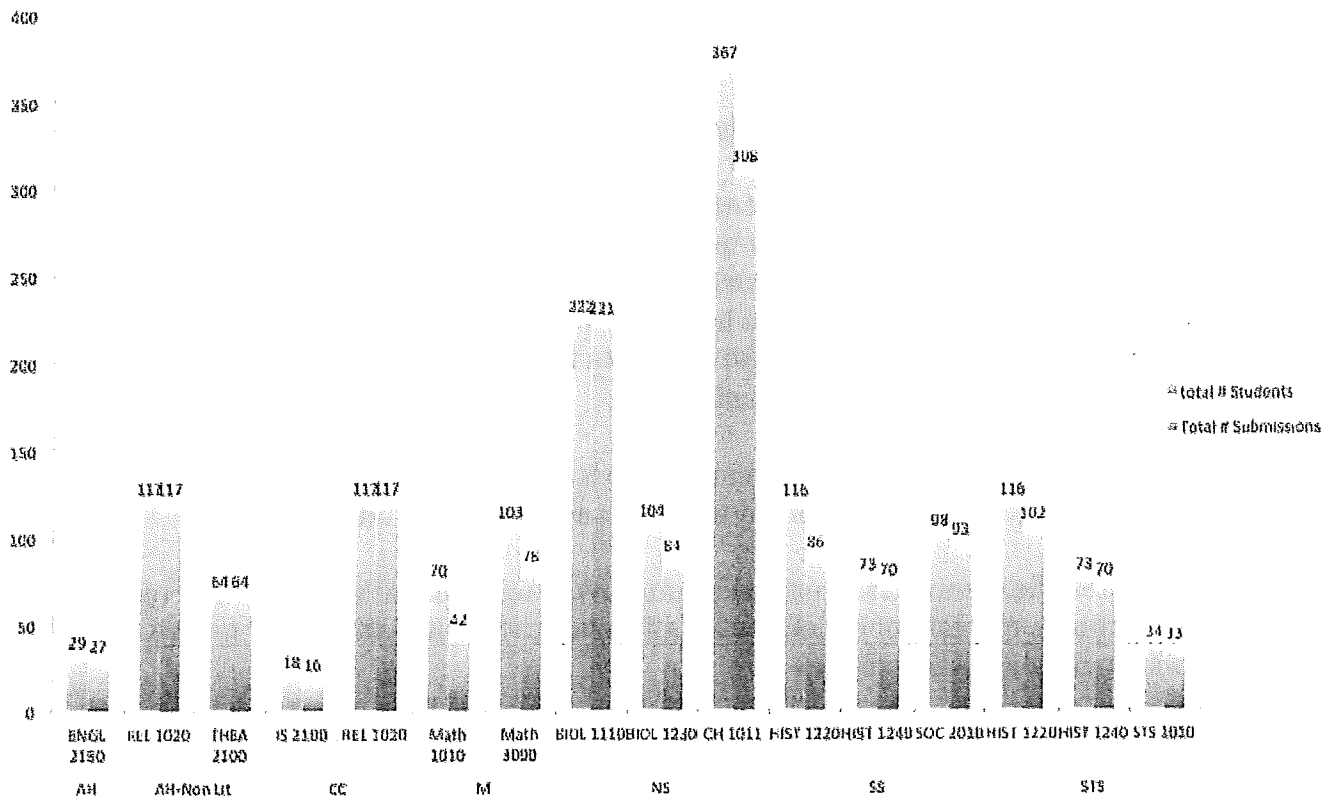
AGENDA  
**University Undergraduate Curriculum Committee Meeting**  
Friday—May 1, 2015 —1:30 PM  
E304 Martin Hall

- 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 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
- 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 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

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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 Tyminski; Hugh Spittler; 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

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**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 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

January 26, 2015

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 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

## Rhonda Todd

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**To:** Rhonda Todd  
**Subject:** FW: Request for statement to be added to catalog

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*  
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Approved Courses/Curricula  
 April 3, 2015  
 University Undergraduate Curriculum Committee

<b>I. College of Architecture, Arts and Humanities</b>				
<b>A. Department of English</b>				
	<b>ENGL 3530</b>	Ethnic Am Lit	3(3,0)	1
	<b>ENGL 3540</b>	Lit Mid East & North Africa	3(3,0)	3
<b>IV. College of Agriculture, Forestry and Life Sciences</b>				
<b>A. Department of Animal and Vet Sciences</b>				
	<b>AVS 2020</b>	Introduction to Leadership	2(2,0)	6
	<b>AVS 2021</b>	Introduction to Leadership Laboratory	1(2,0)	8
<b>B. Department of Biological Sciences</b>				
		BS Biological Science		10
		Biological Sciences		13
	<b>BIOL 4920</b>	Internship in Biological Science		15
<b>C. Department of Microbiology</b>				
	MICR 2050	Introductory Micro		18
	MICR 3050	General Microbiology		20
	MICR 4030/6030	Marine Microbiology	3(3,0)	22
	MICR 4950	Service Learning		24
	MICR 4920	Internship		27
**Items in gray are tabled and not approved at this meeting.				

Approved Courses/Curricula

May 1, 2015

University Undergraduate Curriculum Committee

<b>I. College of Architecture, Arts and Humanities</b>				
<b>A. Department of Art</b>				
	ART 2050	Beg Life Drawing - change		1
		Art Minor		3
<b>B. Department of English</b>				
		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
<b>II. College of Agriculture, Forestry and Life Sciences</b>				
<b>A. Department of Animal and Vet Sciences</b>				
	AVS 2020	CAFLS Plus Lecture	3(2,0)	13
	AVS 2021	CAFLS Plus Lab	0(2,0)	19
<b>B. Department of Biochemistry</b>				
	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	Fundament 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 descripton		46
	GEN 4910	Dir Res in Genetics - change modifier, catalog description		48
<b>C. Department of Food Science</b>				
	FDSC 2010	Man and His Food - change method, credit, descrip, prere	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	0(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, descrip, prerequisite	3(3,0)	73
	NUTR 4550/6550	Nutr Metabolism - change title, descrip, prerequisite	3(3,0)	75
		BS Food Science - change major		77
		BS Nutrition and Dietetics - change major		80
		Overview of Nutrition Curriculum		86
<b>III. School of Education</b>				
<b>A. Elementary Education</b>				
	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
<b>IV. College of Business and Behavioral Science</b>				
<b>A. Economics</b>				
	ECON 4050/6050	Intro to Econometrics - change prerequisites	4(3,3)	97
<b>V. College of Engineering and Science</b>				
<b>A. Bioengineering</b>				
	BIOE 4510	Creative Inquiry Bioengineering- change catalog descriptio	1-6	99

		BIOE 4910	Research in Bioengineering- change catalog description	1-6	101
<b>B.</b>	<b>Chemistry</b>				
		CH 4360/6360	Computational Quantum Chemistry- new course	3(3,0)	103
<b>C.</b>	<b>Environmental Engineering and Earth Science</b>				
		BE 4150/6150	Biosystems Engineering- change credit and prerequisiste	3(3,0)	105
<b>D.</b>	<b>General Engineering</b>				
		ENGR 1000	Major Discovery Seminar- new course		109
		ENGR 1060	Engineering Discipline and Skills II- change prerequisite		111
		ENGR 1070	Programming and Problem Solving I- change prerequisite		113
		ENGR 1080	Programming and Problem Solving II- change prerequisite		115
		ENGR 1090	Prog/Problem Solving Apps- change prerequisite		117
		ENGR 1490	Introduction to Engineering- change prerequisite		120
		ENGR 1510	Engineering Skills- change prerequisite		121
		ENGR 1520	Engineering Computer Skills- change prerequisite		123
		ENGR 1530	Engineering Foundation Skills- change prerequisite		125
		ENGR 1640	Summer MATLAB Programming- change prerequisite		127
<b>E.</b>	<b>Industrial Engineering</b>				
		IE 4460/6460	new course, change catalog description, and prerequisite	3(3,0)	129
		IE 4810/6810	new course, change catalog description, and prerequisite		132
<b>F.</b>	<b>Math Sciences</b>				
		STAT 4020	Introduction to Statistical Computing- change prerequisite		134
<b>G.</b>	<b>Mechanical Engineering</b>				
		ME 4000	Senior Seminar- change prerequisite	1(1,0)	136
		ME 4560/6560	Additive Manufacturing- new course	3(2,3)	137