

# MEMORANDUM

TO:

Debra Jackson, Institutional Effectiveness and Assessment

Doris R. Helms, Vice President for Academic Affairs and Provost

James F. Barker, President

DEAN

UNDERGRADUATE STUDIES

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

P 864-656-3942 F 864-656-1363 FROM:

Janice W. Murdoch, Chair, Undergraduate Curriculum Committee

DATE:

November 27, 2012

SUBJECT:

Administrative Approval of Curriculum Items

The Undergraduate Curriculum Committee met on November 2, 2012 to approve the attached curriculum/course changes received in the Office of the Provost, November 27, 2012. The purpose of this memorandum is to respectfully request that you review this information and concur by giving final approval.

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DR. DEBRA JACKSON, INSTITUTIONAL EFFECTIVENESS AND ASSESSMENT

DR. DORIS HELMS, VICE PRESIDENT FOR ACADEMIC AFFAIRS & PROVOST

James F. Barker, President CLEMSON UNIVERSITY

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C: File

Attachments

#### **AGENDA**

### University Undergraduate Curriculum Committee Meeting Friday—November 2, 2012—1:30 PM E304 Martin Hall

- I. Call to order
- II. Introductions
- III. Consideration of October meeting minutes
- IV. Old Business
  - A. iRoar Update Julie Pennebaker
  - B. QEP Update Jan Murdoch
  - C. Revision to Critical Thinking Competency
- V. New Business
  - A. 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
- VI. Curricula/course approvals attached
- VII. Other business
- VIII. Adjourn

### Agenda Courses/Curricula November 2, 2012

#### University Undergraduate Curriculum Committee

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

11

A.	Agricultural Mechanizati	on and Business		
	AGM 319	Agribusiness Decision Analysis - new course	3(3,0)	1
	AGM 400	Senior Seminar - new course	1(0,2)	3
		Agricultural Mech and Business - change curriculum requirement	1(0,2)	5
В.	Animal & Veterinary Scie	ences		
	AVS 204	Horse Care Technique - change prerequisites	2(1,2)	7
	AVS 205	Horsemanship I - change catalog description	2(0,4)	9
	AVS 207	Horsemanship II - delete course	-(-/./	11
	AVS 209	Livestock Exhib Tech - change prerequisites	2(1,2)	12
	AVS 211	Meat Processing Technique - new course	2(1,2)	14
	AVS 417/617	Ani Agribus Develop - change prerequisites	2(1,2)	16
		Animal & Veterinary Sciences - change curriculum requirements	-1-7-1	18
		Animal & Veterinary Sciences - change curriculum requirements		21
		Animal & Veterinary Sciences - change curriculum requirements		24
C.	Soils & Sustainable Crop	Systems		
	CSENV 455	Seminar - change catalog description	1(1,0)	27
	SSCS 101	Surv Soil & Sus Crop - change catalog description	1(1,0)	29
	SSCS 102	Acad Prof Dev I - delete	, , ,	31
	SSCS 401	Acad Prof Dev II - change catalog title	1(1,0)	32
		SSCS (Agricultural Biotechnology) - change curriculum requirements		33
		SSCS (Soil/Water Environmental Sci - change curriculum requirements		35
		SSCS (Sustanable Crop Production) - change curriculum requirements		37
D.	Horticulture			
	HORT 409	Seminar - change catalog title, description, method of		
		instruction, prerequisites	1(1,0)	39
		Horticulture - change curriculum requirements		41
	PL PA 310/H310	PL Diseases & People	3(2,3)	46
	PL PA 411/611	Plant Dis Dial I - change credit	2(1,3)	47
E.	Food Science			
	NUTR 204	Nutrition Across the Life Cycle - new course	3(3,0)	49
	NUTR 427	Nutrition Counseling - new course	1(1,0)	51
		Food Science - change concentration		53
		General Education Checklist - Food Science		55
Coll	ege of Architecture, Arts an	d Humanities		
A.	Pan African Studies			
		Pan African Studies (BA) - new major		57 ✓
		General Education Checklist		61
	PAS 400	Hip Hop and African American Contemporary Culture - new	3(3,0)	63
	PAS 468	Comparatie Racism and Discrimination - new course	3(3,0)	66
В.	Performing Arts			
		Prod Studio Perf Arts (Music) - change curriculum requirements		69
		General Education Checklist (Music)		74
		Music Minor - change minor requirement		75
	MUSIC 142	Music Fundamentals - change catalog title and description		
		change prerequisites	3(3,0)	76
	MUSIC 143	Aural Skills I - new course	1(0,2)	78
	MUSIC 144	Music Theory II - new course	3(3,0)	80
	MUSIC 145	Aural Skills II - new course	1(0,2)	82

		MUSIC 242	Music Theory - change catalog title, description, prerequisites	3(3,0)	84
		MUSIC 243	Aural Skills - change catalog title, description, prerequisites	1(0,2)	86
		MUSIC 246	Accel Music Theory I - delete course		88
		MUSIC 247	Accel Aural Skill I - delete course		89
		MUSIC 248 MUSIC 249	Accel Mus Theory III - delete course		90
		MUSIC 310	Accel Aural Skill II - delete course		91
		MOSIC STO	Survey of Music Hist - delete course  Prod Studio Perf Arts (Audio) - change curriculum requirements		92
			General Education Checklist (Audio Technology)		93 96
		AUDIO 380	Audio Engineering I - change prerequisites	3(2,2)	97
		AUDIO 480	Audio Engineering II - change prerequisites	3(2,2)	98
		AUDIO 499/699	Independent Study - new course	1-3(1-3)	99
			Prod Studio Perf Arts (Theatre)-change curriculum requirements		101
			General Education Checklist (Theatre)		108
			Theatre - change minor requirement		109
	C.	English			
	•	ENG 355	Popular Culture - change catalog title, description, prerequisites	3(3,0)	110
		ENG 443	Theories of World Literature - new course	3(3,0)	110
				5(5,6)	***
111	Coll	ege of Engineering & Scienc	ce		
	A.	Bioengineering			
			Bioengineering - change curriculum requirements		114
	В.	Chemistry			
		CH 401/H/601	Organometallic Chemistry	3(3,0)	120
			Significante differnativ	3(3,0)	120
	C.	Civil Engineering			
			Civil Engineering - change curriculum requirements		122
		CE 321	Geotechnical Engr change prerequisites	4(3,3)	126
		CE 351	Civil Engr. Materials - change prerequisites	4(3,3)	127
		CE 437/637	Sustainable Energy Project - new course	3(3,0)	129
	D.	Computer Science			
			Computer Science (BA) - change curriculum requirements		131
			Computer Information Systems - change curriculum requirement		133
		Figure 10 Communication For	-b., b		
	E.	Electrical & Computer Eng ECE 311		410.41	4==
		ECE 311	Elec Engr Lab III - change prerequisites	1(0,1)	135
	F.	Environmental Engineerin	ng & Earth Science		
		_	Environmental Engineering - change in curriculum		136
	G.	General Engineering - Cat			
		CES 101	Engr with Recitation - delete course		142
		ENGR 150	Intro to Materials - delete course		143
		EG 490	Top Engr/Comp Graph - delete course		144
			8/209/L209/210/H210/L210 - change department abbreviation D2 - change department abbreviation		145 146
	Н.	Industrial Engineering			
	• • • •	IE 201	System Design - change catalog title	4(3,3)	1/17
		IE 280	OP Res Methods I - change catalog title	4(3,3) 3(3,0)	147 148
		IE 360	DES/CON of Ind Sys I - change catalog title	3(3,0)	149
		IE 361	DES/Con of Ind Sys II - change catalog title	3(3,0)	150
		IE 381	OP RES Methods II - change catalog title	3(3,0)	151
		IE 430/630	Intro to HC Sys-change catalog title/description/prerequisites	3(3,0)	152
		IE 452/652	Reliability Eng - change prerequisites	3(3,0)	154

## Agenda Courses/Curricula

# November 2, 2012 University Undergraduate Curriculum Committe

		_	University Undergraduate Curriculum Committee			
		IE 456/656	Supply Chain Design - change prerequisites	3(3,0)	155	
		IE 460/660	Qual Imp Meth - change prerequisites	3(3,0)	156	
		IE 465/665	Facil Plan & Des - change prerequisites	3(3,0)	157	
		IE 487/687	Industrial Safety - change prerequisites	3(3,0)	158	
		IE 489/689	Ind Ergo and Auto - change prerequisites	3(2,3)	159	
	I.	Mechanical Engineering				
			Mechanical Engineering - change curriculum requirements		160	
	J.	Material Science & Engine	eering			
		MS&E 250	Poly & Fib Sci I - change of catalog title	3(3,0)	162	
		MS&E 407	Senior Capstone Des change method of instruction	3(1,6)	163	
		MS&E 456/656	Poly & Fib Sci II - change of catalog title and transcript title	3(2,2)	165	
		MS&E 461/H461	Poly & Feb Sci III - change of catalog and transcript title	3(2,2)	166	
		MS&E 491	Undergrad Research - change method of instruction, course			
			modifier, and catalog description	3(3,0)	167	
IV.	Coll	ege of Health, Education, ar	nd Human Development			
		NURS 350	Tech & Phil in Nurs - delete course		169	
		NURS 485	Nurse Extern Pract - delete course		170	
		NURS 317	Nursing Development - delete course		171	
		NURS 313	Hlth Assmt/Lifespan - delete course		172	
٧.	College of Business and Behavioral Science					
	A.	Management				
		MGT 440	Negotiations - new course	3(3,0)	173	
	В.	Military Leadership				
		ML 211	Cadet Fld Lead Train - delete course		400	
			Military Leadership - change minor requirement		182	
					183	

## University Undergraduate Curriculum Committee

Minutes Meeting E304 Martin Hall October 5, 2012

Members Present:

Jan Murdoch, chair; Michael Silvestri; Eric Touya; Mike Coggeshall; Angela Morgan; Bob Kosinski; Mary Beth Kurz; Brian Dominy; Bob Horton; Roxanne Amerson; Gordon Cochran; Perry Austin; Jeffrey Appling; Cecelia Hamby; Mary Bryant; Donna Barrett; Shannon Clark; Pam Mack; Gail Ring; David Knox and Rhonda Todd

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**Guests Present:** 

Jimmy Sanderson; Joe Mazer; Karyn Jones; Diane Perpich; and Ben White

Murdoch convened the meeting at 1:31 PM

#### Welcome and introductions

#### Approval of minutes

The committee approved the September meeting minutes.

#### **New Business**

A. iRoar Update — Clark thanked the faculty who have worked to review the prerequisites/co-requisites/concurrent and clarify language. Clark reported that this review has opened up many issues and questions, and as a response changes are happening daily. She apologized for contradictions some may have received as this is new to their department as well. Murdoch stated that changes that produce problems and/or barriers for other majors must be brought to the Curriculum Committee.

QEP Update – Murdoch reported that the QEP Steering Committee is moving forward with sophomore seminars to promote critical thinking, and pilots will be available this spring. Murdoch stated the committee will work on models, structure, and plan faculty workshops. Committee members discussed staffing overloads, sustainability, faculty voting, and curriculum issues. Knox stated that he would like to see assessment testing before and after the pilot seminars. Austin stated that students want to see engagement included in general education reform. Coggeshall questioned what the concerns of students might be. Austin stated that he plans to make a proposal at the December meeting. Murdoch stated that many of these issues and questions need to be taken to their college representatives on the QEP committee. Murdoch stated that modifications and adjustments can be made along the way, but the basic proposal must be to SACS in December 2012.

B. Suggested Revision of the Critical Thinking Competency – Kosinski distributed copies of the proposal for changes to the critical thinking competency. Kosinski stated that he volunteered to evaluate eportfolio artifacts during the summer assessment, and it seemed impossible to satisfy the critical thinking competency with just one artifact; therefore, prompting the proposal to change. Committee members discussed concern about the evaluation of the artifacts. Murdoch stated that many of these problems can be alleviated if students will write a thorough rationale

statement about why the artifact will work to meet the competency. The committee discussed some word issues in the proposed document and the final statement and rubric are as follows: "Demonstrate the ability to assemble evidence relevant to a significant and complex issue, evaluate the quality and utility of the evidence, and use this evidence to come to a logical conclusion about the issue."

This not only could apply to a broad range of disciplines, but it suggests its own rubric. This rubric would ask the reviewer to determine if the student:

- 1. Assembles relevant evidence.
- 2. Assesses the quality and utility of the evidence.
- 3. Analyzes the evidence to reach a logical conclusion or solution.

Murdoch encouraged members to discuss the proposal within their college.

#### C. 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
- D. Curriculum/course approval See attached.

#### Other Business

Morgan stated that BBS is making major changes to the Pre-Business program.

There being no further business, the meeting was adjourned at 3:58 PM.

Minutes respectfully submitted by Rhonda Todd.

#### Suggested Revision of the Critical Thinking Competency

Robert Kosinski Biological Sciences

During the summer of 2012, I volunteered to participate in the faculty evaluation of ePortfolios. The students in question had already graduated, so our evaluation was for programmatic assessment only. I was struck by several problems with the Critical Thinking evaluation: the competency as written could not be satisfied with just one artifact, and there was a disconnect between the competency and the rubric used to score it. I would like to suggest some changes to the critical thinking competency that will make the requirements clearer.

#### Problems with the Present Critical Thinking Competency

The present Critical Thinking competency is, "Demonstrate the ability to critically analyze the quality and utility of knowledge gained throughout the undergraduate experience and apply this knowledge to a wide range of problems." As written, this would require a whole ePortfolio, probably consisting of artifacts from multiple fields, and collected over the course of the student's college career. Nevertheless, we want the student to submit *one* artifact that best demonstrates critical thinking.

The present rubric is another problem. It has three parts, and asks if the artifact a) demonstrates knowledge within the major, b) demonstrates knowledge outside the major, and c) shows the ability to apply knowledge and make evaluative judgments. The student will probably never see this rubric, and the definite requirements for showing knowledge both inside and outside the major are not clear from the wording of the competency.

#### Suggested Changes to the Competency and Rubric

A group of ePortfolio evaluators from CAFLS and CoES suggested the following wording of the competency:

"Demonstrate the ability to assemble evidence relevant to a significant and complex issue, evaluate the quality and utility of the evidence, and use this evidence to come to a logical conclusion about the issue."

This not only could apply to a broad range of disciplines, but it suggests its own rubric. This rubric would ask the reviewer to determine if the student:

- 1. Assembles relevant evidence.
- 2. Assesses the quality and utility of the evidence.
- 3. Analyzes the evidence to reach a logical conclusion or solution.

# Approved Courses/Curricula October 5, 2012

		LIB 100	University Undergraduate Curriculum Committee Clemson Connect - change to CU 100	0(0,0)	1
1.	Col	lege of Agriculture, Forestry	, and Life Sciences		
	A.	Agricultural Mechanization	on and Business		
		AGM 419	AG Entrepreneurship -add a crosslisting ELE-419	3(3,0	_
11	Col	lege of Architecture, Arts ar	d Humanities		2
	A.	Construction Science & N	lanagement		
		CSM 498	Current Topics in Construction - change prerequisite	1-3	7
	В.	English			
			Minor in Film Studies - change requirement		8
	C.	Communication Studies			
			Sports Communication - New major		9
			Sports Communication - General Education Checklist		13
		COMM 324	Communication, Sport, & Society - new course	3(3,0)	15
		COMM 325	Sports Communication - change course description	3(3,0)	17
		COMM 426	Social Media & Sports Communication - new course	3(3,0)	19
		COMM 427	Communication in Sports Organizations - new course	3(3,0)	21
		COMM 428	Interpersonal/Family Comm & Sports	3(3,0)	23
	D.	Philosphy and Religion			
			Religious Studies - New Major - edited		25
		DEL 200	Religious Studies - General Education Checklist-edited		28
		REL 300 REL 305	Studying Religion: Theories and Methods	3(3.0)	30
		REL 399	Constucting Scripture - new course Junior Research Colloquium - new course	3(3,0)	32
		REL 490	Senior Seminar - new course	3(3,0)	34
		REL 404	Early Christianity - change course number, add crosslisting	3(3,0) 3(3,0)	36 38
		REL 310	Religion in the US - change catalog title, add crosslisting	3(3,0)	40
		HIST 373	Prot Reformation - add crosslisting with REL 310	3(3,0)	42
		HIST 351	Ancient Near East - add crosslisting with REL 351	3(3,0)	44
			Women's Leadership - New Major	-(-/-/	46
			Women's Leadership - General Education Checklist		50
		WS 230	Women and Leadership - new course	3(3,0)	52
		WS 401	Senior Seminar- new course	3(3,0)	54
		WS 490	Creative Inquiry - new course	1-3	56
		WS 495	Independent Study - new course	1-1(1-3)	58
Ш	College of Engineering & Science				
	A.	Chemical and Biomolecula	r Engineering		
			Chemical Engineering (BS) - change concentration		60
			Chemical Engineering (BS) with Biomolecular Concentration -		
			change curriculum requirements		62
IV	Coll	ege of Business and Behavio	ral Science		
	Α.	Political Science			
		POSC 103/H	Introduction to Political Theory - new course	3(3,0)	64
		POSC 449	Political Theory Capitalism - change prerequisites	3(3,0)	74
			Political Theory - change catalog descpt., prerequisites, course	,	
		POSC 450	modifier	3(3,0)	76
		POSC 453	Amer Pol Thought - change prequisite	3(3,0)	82
		POSC 455	POL THGHT AM FNDRS - change prerequisites	3(3,0)	84
			Political Science (BA) - change curriculum requirements - edited		86

		Political Science (BS) - change curriculum requirements - edited Political Science - change minor requirements		90 99
В.	Management			
	MGT 411 MGT 307/H	Project Management - change prerequisites Human Resource Mgt change prerequisites	3(3,0) 3(3,0)	101 103