CLEMSON
U N I V E R S I T Y

# 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:      September 12, 2014

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 September 5, 2014 to approve the attached curriculum/course changes received in the Office of the Provost, September 12, 2014. The purpose of this memorandum is to respectfully request that you review this information and concur by giving final signature approval.

APPROVED:

_Debra B Jackson_ DATE 9-17-14
DR. DEBRA JACKSON, INSTITUTIONAL EFFECTIVENESS AND ASSESSMENT

_Robert H Jones_ DATE 9-17-14
DR. ROBERT JONES, VICE PRESIDENT FOR ACADEMIC AFFAIRS & PROVOST

/rft

C: File

Attachments

AGENDA
**University Undergraduate Curriculum Committee Meeting**
Friday—September 05, 2014 —1:30 PM
E304 Martin Hall


**I.        Call to order**

**II.      Introductions**

**III.     Consideration of May meeting minutes**

**IV.    New Business**
A. Proposed General Education Assessment Protocol (attached)
B. SACSCOC New Policy Statement
C. General Education Subcommittees
D. General Education Attributes
E. Internships

**V.      Old Business**

**VI.     Committee reports**
A. Arts & Humanities – Bruce Whisler – The subcommittee denies approval of
   EAS 1110
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 – Michael LeMahieu

**VI.     Curricula/course approvals - attached**

**VII.    Other business**

**VIII.   Adjourn**

**PROPOSAL**

**TO:** the University Undergraduate Curriculum Committee

**FROM:** the "Process" Subcommittee of the Gen Ed Assessment Working Group

**SUBJECT:** Proposed Gen Ed Assessment Protocol

The end of the ePortfolio graduation requirement means that Clemson must devise a new method to determine whether Gen Ed courses are successfully teaching Gen Ed competencies. The Gen Ed Assessment Working Group is leaning towards requiring Gen Ed courses to give assignments that could demonstrate a competency and then having them submit all or a random sample of the resulting artifacts for later faculty evaluation.

However, this means that more responsibility will shift to the faculty who teach Gen Ed courses. Gen Ed faculty must be aware of the requirements of the competency and the characteristics of a valid artifact.

We suggest that the group propose the following six policies for approval by the University Undergraduate Curriculum Committee:

a) **Gen Ed faculty need to be aware of the requirements of the competency their courses are teaching** (see example on next page);

b) **To maintain its Gen Ed status, a Gen Ed course or its laboratory component must give at least one assignment that could potentially demonstrate the competency the course claims to be teaching. This includes both Gen Ed courses listed in the *Announcements* and distributed competency courses listed by departments in their Gen Ed Checklists;**

c) **This assignment should be designed so it is consistent with the text of the Gen Ed competency and its evaluation rubric;**

d) **The faculty member teaching the Gen Ed course should give each artifact its normal grade within the course, and then a sample of student artifacts should be submitted (either by the faculty member or by the students themselves) to an "Artifact Repository" where they will be accessible to evaluators;**

e) **Feedback on evaluation of artifacts from a course should be communicated to the responsible Gen Ed faculty member and to his/her department and college;**

f) **If the course meets its goals, no response from the instructor is necessary. If it does not meet its goals, the instructor should inform the departmental assessment committee what steps he/she intends to take. These might include modifying the course, starting the process to modify of the competency, or relinquishing the course's Gen Ed status.**

### Example of Information Sent to Gen Ed Faculty Member

The following information might be sent to Gen Ed faculty whose courses are responsible for the Natural Sciences competency:

Text of the competency:

**Demonstrate the process of scientific reasoning by performing an experiment and thoroughly discussing the results with reference to the scientific literature, or by studying a question through critical analysis of the evidence in the scientific literature.**

A successful artifact will:

Exhibit understanding (appropriate for the course level) of the scientific principles behind the experiment or literature survey;
Formulate clear, falsifiable hypotheses;
If reporting on an experiment, use an experimental design capable of testing the hypotheses;
Collect adequate data;
Analyze the data appropriately;
Draw conclusions supported by the data;
Discuss the broader implications of the study.

Further tips to the instructor:

- The typical artifact is a report on a formal laboratory or field study. An artifact of this kind will report on a scientific experiment in which a hypothesis is tested, data are analyzed, and conclusions are drawn about the correspondence of the results to expected outcomes or values.
- Non-experimental (literature survey) papers may be submitted if they critically review natural science research, discuss and analyze issues raised by that research, and are best if they propose questions which arise from this analysis.
- The student's understanding of the science behind the experiment or literature should be evident in the artifact. Artifacts that do not demonstrate scientific knowledge will be regarded as inadequate.
- Worksheets, short-answer assignments, descriptions of routine measurement techniques, book reports, PowerPoint presentations, and lesson plans cannot demonstrate the Natural Sciences competency.

# SACSCOC New Policy Statement

Given the SACSCOC CORE Requirement 2.7.1 related to the 150 hours for a combined Bachelor/Master's degree, we need to add a clarification into the policies in the graduate and undergraduate announcement related to the combined degree. I have included the SACSCOC statement below as a reminder. Remember a core requirement must be met in order to be reaffirmed.

## From Undergraduate Announcements:

### Combined Bachelor's/Master's Plan

Students may reduce the time necessary to earn both degrees by applying graduate credits to both undergraduate and graduate program requirements. To be eligible, the student must have completed the bachelor's curriculum through the junior year (minimum 90 credits) and have a minimum overall grade-point average of 3.4. A maximum of 12 credit hours of graduate courses in the master's program may be applied to the bachelor's program. The combined bachelor's/master's degree (documented on GS6BS/MS) must have a minimum combined total of 150 credit hours. This total may contain a maximum of 6 credit hours of thesis research. As determined by the participating bachelor's program, graduate courses may be applied to the bachelor's degree as electives or technical requirements or by substitution of 7000- or 8000-level courses for required undergraduate courses. Under no circumstances can 6000-level counterparts of 4000-level courses required for the bachelor's degree be counted toward master's requirements. Combined bachelor's/master's plan students are not eligible for graduate appointments for financial aid until their bachelor's degrees have been awarded.

This change reflects the July Board decision by SACSCOC. The details related to implementation are in discussion with Bill Farrell, Assoc Dean Grad School. Currently, 92 students are enrolled in the combined degree.

D. Packm

# 2014-2015
## GENERAL EDUCATION SUBCOMMITTEES

| Name | | email | Location | Phone | Title | Department |
|---|---|---|---|---|---|---|
| **Arts & Humanities** | | | | | | |
| Joe Mazer | | jmazer@clemson.edu | 404 Strode Tow | 656-5254 | Assistant Professor | Communication Studies |
| Eric Touya | | etouya@clemson.edu | 505 Strode Tow | 656-3540 | Assistant Professor | Languages |
| Bruce Whisler | (Chair) | bshisle@clemson.edu | 615 Brooks Cent | 656-0172 | Assistant Professor | Performing Arts |
| **Mathematics & Natural Science** | | | | | | |
| Bob Kosinski | (Chair) | riksn@clemson.edu | 147 Long Hall | 656-3830 | Professor | Biological Science |
| Brian Dominy | | dominy@clemson.edu | 367 Hunter Lab | 656-7702 | Associate Professor | Chemistry |
| Calvin Williams | | calvinw@clemson.edu | O-323 Martin H | 656-5241 | Associate Professor | Mathematical Sciences |
| **Social Sciences** | | | | | | |
| Laura R. Olson | (Chair) | laurao@clemson.edu | 230-G Brackett | 656-1457 | Professor | Political Science |
| June Pilcher | | jpilche@clemson.edu | 410C Brackett H | 656-4985 | Professor | Psychology |
| John M. Coggeshall | | raucus@clemson.edu | 137 Brackett Ha | 656-3822 | Professor | Sociology & Anthropology |
| **Cross-Cultural Awareness** | | | | | | |
| John M. Coggeshall | (Chair) | raucus@clemson.edu | 137 Brackett Ha | 656-3822 | Professor | Sociology & Anthropology |
| Yanhua Zhang | | yhzhang@clemson.edu | 313 Strode Tow | 656-5387 | Associate Professor | Languages |
| James M. Burns | | burnsj@clemson.edu | 120 Hardin Hall | 656-5359 | Associate Professor | History |
| **Science, Technology, and Society** | | | | | | |
| Pamela Mack | (Chair) | pammack@clemson.edu | B-06 Hardin Hall | 656-5356 | Associate Professor | History |
| Ian Walker | | iwalker@clemson.edu | 320 Fluor Daniel | 656-7209 | Professor | Electrical & Computer Engineering |
| Christine Minor | | mminor@CLEMSON.EDU | 330-C Long Hall | 656-3837 | Senior Lecturer | Biological Science |
| **Ethical Judgement** | | | | | | |
| Daniel (Dan) Wueste | (Chair) | ernest@clemson.edu | 242 Hardin Hall | 656-6147 | Associate Professor | Philosophy and Religion |
| **Critical Thinking** | | | | | | |
| Sarah Winslow | (Chair) | swinslo@clemson.edu | 135A Brackett | 656-3819 | Associate Professor | Sociology & Anthropology |
| **Communication** | | | | | | |
| Cameron Bushnell | (Chair) | cbushne@clemson.edu | 804 Strode Tow | 656-3151 | Associate Professor | English |

**Rhonda Todd**

Hi Rhonda:

The Arts & Humanities Sub-Committee denies the course EAS 1110 for Arts & Humanities Gen Ed credit.

Thanks,
Bruce Whisler

-----Original Message-----
From: Rhonda Todd
Sent: Thursday, August 28, 2014 8:51 AM
To: Greg Shelnutt; Eric Touya; Bruce Whisler
Cc: Jeffrey Appling; Janice Murdoch
Subject: GENERAL EDUCATION SUBCOMMITTEE REVIEW

Good morning,

The new course attached will be submitted to the Undergraduate Curriculum Committee at the September 2014 meeting. Please review for the submitted A&H (non-literature) General Education credit.

Best Regards,
Rhonda
Rhonda Todd
Administrative Coordinator
Vice Provost and Dean of Undergraduate Studies
E101 Martin Hall
Clemson, SC 29634
rtodd@clemson.edu
P 656-3942
F 656-1363

-----Original Message-----
From: undergradscans@clemson.edu [mailto:undergradscans@clemson.edu]
Sent: Thursday, August 28, 2014 8:33 AM
To: Rhonda Todd
Subject: Message from "RNP0026736436F6"

This E-mail was sent from "RNP0026736436F6" (Aficio MP C3502).

Scan Date: 08.28.2014 08:32:57 (-0400)
Queries to: undergradscans@clemson.edu

July 15, 2014

# MEMORANDUM

TO:             Collegiate Deans
                Members, Undergraduate Curriculum Committee
                General Education, Chairs

FROM:           Janice W. Murdoch
                Vice Provost and Dean of Undergraduate Studies

RE:             Undergraduate Curriculum Committee
                Fall Semester 2014 and Spring Semester 2015 Meeting Dates

**DEAN
UNDERGRADUATE
STUDIES**

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

P  864-656-3942
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The first meeting of the Undergraduate Curriculum Committee for the fall semester will be on Friday, September 5, 2014 at 1:30 p.m.   Meetings begin at 1:30 p.m. on the first Friday of each month. Listed below are agenda item due dates, the meeting location, and the meeting dates for the Undergraduate Curriculum Committee for the 2014-2015 academic year.

**Undergraduate Curriculum Committee Meeting Dates**
**Friday, September 5, 2014–E304 Martin Hall**
**Friday, October 3, 2014– E304 Martin Hall**
**Friday, November 7, 2014– E304 Martin Hall**
**Friday, December 5, 2014 - E304 Martin Hall** - Final meeting for *2015-2016 Undergraduate Announcements*
**Friday, February 6, 2015- E304 Martin Hall**
**Friday, March 6, 2015– E304 Martin Hall**
**Friday, April 3, 2015– E304 Martin Hall**
**Friday, May 1, 2015— E304 Martin Hall**

Agenda items are to be received at E101 Martin Hall, Dean Murdoch's office, by noon, on the dates listed below:

**Undergraduate Curriculum Agenda Items Due Date**
**Monday, August 25—Noon for September 5, 2014 meeting**
**Monday, September 22—Noon for October 3, 2014 meeting**
**Monday, October 27—Noon for November 7, 2014 meeting**
**Monday, November 24—Noon for December 5, 2014 meeting**
**Tuesday, January 27 —Noon for February 6, 2015 meeting**
**Monday, February 23—Noon for March 6, 2015 meeting**
**Monday, March 23 - Noon for April 3, 2015 meeting**
**Monday, April 20 - Noon for May 1, 2015 meeting**

I look forward to serving as chairperson of this committee.  If you have questions, please feel free to contact me (janw@clemson.edu) or my assistant, Rhonda Todd (rtodd@clemson.edu) or call 656-3942.  Thank you.

I.  **College of Art, Architecture, and Humanities**

    A.    **Languages**

        **EAS 1110**       Intro to Chinese Lang and Culture             3(3,0)     1 *Approved*

University Undergraduate Curriculum Committee
Minutes Meeting
E304 Martin Hall
May 2, 2014, 1:30 PM

**Members Present:**     Jan Murdoch, chair; Michael Silvestri, Mike Coggeshall; Laura Olson for Angela
Morgan; Bob Kosinski; Cheryl Ingram-Smith; Mary Beth Kurz; Brian Dominy; Bob
Horton; John Whitcomb; Maddy Thompson; Matt Abrams; Jan Comfort; Jeff
Appling; Shannon Clark; Julie Pennebaker; Donna Barrett; Pam Mack; David
Knox and Rhonda Todd

**Guests:**     Larry Fredendall and Nadim Aziz

Murdoch convened the meeting at 1:31 PM

## Approval of minutes
The committee approved the April meeting minutes.

## New Business

## Old Business
A. **Eliminate ePortfolio as a Graduation Requirement** (attached) – The committee discussed
elimination of the ePortfolio as a graduation requirement and the majority was in agreement to
eliminate. Murdoch reported that this outcome brings additional issues for this committee.
Going forward, how will we assess General Education for SACS? What is the timeline for
graduates? Kosinski reported that while he was in favor of the decision today, he felt it was
hurried along in an inappropriate manner. The committee discussed and agreed that this
change would be effective for the August graduation. The committee discussed that faculty
have never been in favor of assessing General Education, so many expressed concern about
putting this into their workload. Abrams was concerned about the timeline. Murdoch stated
that with this being the last meeting before summer break, the discussion will pick back up for
the September meeting.

B. **Language Requirement for International Students** – No additional report

C. **Course and Curriculum Change System** – Appling reported that some problems have been fixed
and the system is printing better now; however, there are still spacing and workflow issues.
Appling encouraged everyone to use the new system.

C. **Committee Reports**
   a. Arts & Humanities – Bruce Whisler
   b. Mathematical & Natural Sciences – Appling requested information from CAFLS and CES
      about volunteers to serve as the chair and member of this subcommittee. Kosinski agreed
      to chair this subcommittee.
   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

The meeting adjourned at 3:38 PM.

Minutes respectfully submitted by Rhonda Todd

I. **College of Art, Architecture, and Humanities**

    A.    **Department of Art**

| | | | |
|---|---|---|---|
| ART 3570 | Community Supported Art-CI - new course | 3(3,0) | 1 |
| AAH 2100 | Intro to Art and Architecture - change catalog title, abbrev | 3(3,0) | 4 |

    B.    **Construction Science Management**

| | | | |
|---|---|---|---|
| CSM 3510 | Const Estimating - change prerequisites | 3(2,2) | 5 |

    C.    **History**

| | | | |
|---|---|---|---|
| HP 4120 | Historic Construction - delete course | | 6 |

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

    A.    **Horticulture**

| | | | |
|---|---|---|---|
| HORT 3080 | Sust Landscape Des - change title | 3(3,0) | 7 |

    B.    **Wildlife and Fisheries Biology**

| | | | |
|---|---|---|---|
| WFB 1010 | Intro Aqua Fish Wild - delete | | 8 |
| WFB 1020 | Methods of Wildlife/Fish Biol - delete | | 9 |
| WFB 3060 | Intro Wild Conserv - delete | | 10 |
| | Wildlife and Fish Biology - change curriculum requirements | | 11 |

    C.    **Environmental and Natural Resources**

| | | | |
|---|---|---|---|
| | Conservation Biology - change curriculum requirements | | 14 |
| | Natural Resources Management - change curriculum req. | | 17 |

    D.    **Biological Sciences**

| | | | |
|---|---|---|---|
| BIOL 2300 | Emergency Medical Responder - new course | 3(3,0) | 20 |

    E.    **Forest Resource Management - change curriculum requirements**        22
            **Forest Resource Management - Land Surveying Emphasis - change curriculum requirements**    25

    F.    **Microbiology**

| | | | |
|---|---|---|---|
| MICR 2050 | | | 28 |

    G.    **Biochemistry**

| | | | |
|---|---|---|---|
| BCHM 3050 | Essen Elements Bioch | 3(3,0) | 29 |

III. **College of Heath, Education and Human Development**

    A.    **Athletic Leadership**

| | | | |
|---|---|---|---|
| AL 3490 | Princ of Coaching - change prerequisite | 3(3,0) | 31 |
| AL 3500 | Sci Basis I/Ex Phy - change prerequisite | 3(3,0) | 33 |
| AL 3520 | Kinesiology - change prerequisites | 3(3,0) | 34 |
| AL 3530 | Athletic Injuries - change prerequisite | 3(2,3) | 35 |
| AL 4530 | Athletic Injuries - change prerequisite | 3(2,3) | 36 |
| AL 3600 | HS Athl Ethics & Law - change prerequisite | 3(3,0) | 37 |
| AL 3610 | Admin/Org Athletics - change prerequisite | 3(3,0) | 38 |
| AL 3620 | Psych of Coaching - change prerequisite | 3(3,0) | 39 |
| AL 3710 | Coaching Baseball - change prerequisite | 1(0,0) | 40 |
| AL 3720 | Coaching Basketball - change prerequisite | 1(0,0) | 41 |
| AL 3730 | Coaching Cross Country - change prerequisite | 1(0,0) | 42 |
| AL 3740 | Coaching Football - change prerequisite | 1(0,0) | 43 |
| AL 3750 | Coaching Soccer - change prerequisite | 1(0,0) | 44 |
| AL 3760 | Coaching Strgth/Cond - change prerequisite | 1(0,0) | 45 |
| AL 3770 | Coaching Track/Field - change prerequisite | 1(0,0) | 46 |

**B. Elementary Education**

| | | | |
|---|---|---|---|
| EDEL 4820 | Elem Ed Capstone Seminar - change title, instruction, credit | 3(3,0) | 47 |

**C. Education**

| | | | |
|---|---|---|---|
| ED 1970 | CI in Education - change prerequisites | | 49 |
| ED 2970 | CI in Education - change prerequisites | 1-8 | 50 |
| ED 3970 | CI in Education - change prerequisites | 1-8 | 51 |
| ED 4970 | CI in Education - change prerequisites | 1-8 | 52 |

**D. Educational Foundations**

| | | | |
|---|---|---|---|
| EDF 3010 | Principles of American Educ. - change prerequisites | 3(3,0) | 53 |
| EDF 3020 | Edu Psych - change prerequisites | 3(3,0) | 54 |
| EDF 3080 | Classroom Assessment - change prerequisites | 3(3,0) | 55 |
| EDF 3340 | Child Growth and Dev - change prerequisites | 3(3,0) | 56 |
| EDF 3350 | Adol Growth and Dev - change prerequisites | 3(3,0) | 57 |
| EDF 3200 | History of US Education - change prereq. And add cross listing | 3(3,0) | 58 |

## IV. College of Business and Behavioral Science

**A. Political Science**

| | | | |
|---|---|---|---|
| POSC 4470 | International Law - new course | 3(3,0) | 60 |
| POSC 3460 | Entrepreneurship - delete course | | 71 |
| POSC 3670 | Pol Risk Assessment - delete course | | 72 |
| POSC 3820 | Span-Language News - delete course | | 73 |
| POSC 3830 | French-Language News - delete course | | 75 |
| POSC 4270 | Public Management - delete course | | 77 |
| POSC 4720 | Japanese Politics - delete course | | 78 |
| POSC 4730 | Eurasian Politics - delete course | | 79 |
| POSC 3130 | Model United Nations Conference - change description, prerequisite: | 1-6 | 80 |
| POSC 3410 | Quant Meth in Pol Sc - change credit, prerequisites | 3(3,1) | 84 |
| POSC 3100 | Po Sc Internship - change prerequisites | 1-3 | 90 |
| POSC 3110 | Model United Nations- change prequisites | 1-6 | 92 |
| POSC 3210 | Public Admin - change prerequisites | 3(3,0) | 94 |
| POSC 3610 | Intl ol in Crisis - change prerequisites | 3(3,0) | 96 |
| POSC 3620 | Intl Organizations - change prerequisites | 3(3,0) | 98 |
| POSC 3630 | US Forgeign Policy - change prerequisites | 3(3,0) | 100 |
| POSC 3710 | European Politics - change prerequisites | 3(3,0) | 102 |
| POSC 3720 | Pol Culture/E Asia - change prerequisites | 3(3,0) | 104 |
| POSC 3750 | European Integration - change prerequisites | 3(3,0) | 106 |
| POSC 3810 | African Amer Politic - change prerequisites | 3(3,0) | 108 |
| POSC 4030 | US Congress - change prerequisites | 3(3,0) | 110 |
| POSC 4050 | American Presidency - change prerequisites | 3(3,0) | 112 |
| POSC 4070 | Religion and Politics - change prerequisites | 3(3,0) | 114 |
| POSC 4160 | Int Groups & Soc Mov - change prerequisites | 3(3,0) | 116 |
| POSC 4210 | Public Policy - change prerequisites | 3(3,0) | 118 |
| POSC 4230 | Urban Politics - change prerequisites | 3(3,0) | 120 |
| POSC 4240 | Federalism and Igr - change prerequisites | 3(3,0) | 122 |
| POSC 4280 | Natl Security Policy - change prerequisites | 3(3,0) | 124 |
| POSC 4290 | Global Issues - change prerequisites | 3(3,0) | 126 |
| POSC 4360 | Law Courts Politics - change prerequisites | 3(3,0) | 128 |
| POSC 4370 | Constitut Law: Rights & Libert - change prerequisities | 3(3,0) | 130 |
| POSC 4380 | Constitut Law: Struc of Gov - change prerequisities | 3(3,0) | 132 |
| POSC 4420 | Pol Parties & Elect - change prerequisities | 3(3,0) | 134 |
| POSC 4480 | Internat'l Political Economy - change prerequisites | 3(3,0) | 136 |
| POSC 4490 | Political Theory of Capitalism - change prerequisites | 3(3,0) | 138 |
| POSC 4500 | Spec Top in Political Theory - change prerequisites | 1-6 | 140 |
| POSC 4530 | American Political Thought - change prerequisites | 3(3,0) | 142 |

| | | | |
|---|---|---|---|
| POSC 4540 | Southern Politics - change prerequisites | 3(3,0) | 144 |
| POSC 4550 | Pol Thght of American Founding - change prerequisites | 3(3,0) | 146 |
| POSC 4560 | Diplomacy - change prerequisites | 3(3,0) | 148 |
| POSC 4570 | Political Terrorism - change prerequisites | 3(3,0) | 150 |
| POSC 4580 | Political Leadership - change prerequisites | 3(3,0) | 152 |
| POSC 4590 | Ethnic Violence - change prerequisites | 3(3,0) | 154 |
| POSC 4660 | African Politics - change prerequisites | 3(3,0) | 156 |
| POSC 4710 | Russian Politics - change prerequisites | 3(3,0) | 158 |
| POSC 4760 | Middle East Politics - change prerequisites | 3(3,0) | 160 |
| POSC 4770 | Chinese Politics - change prerequisites | 3(3,0) | 162 |
| POSC 4780 | Latin Amer Politics - change prerequisites | 3(3,0) | 164 |
| POSC 4800 | Gender and Politics - change prerequisites | 3(3,0) | 166 |
| POSC 4820 | Political Novel and Film - change prerequisites | 3(3,0) | 168 |
| | Political Science BA - change curriculum requirement | | 170 |
| | Political Science BS - change curriculum requirement | | 174 |
| | Global Politics - change minor requirements | | 184 |

**B. Military Leadership**

| | | | |
|---|---|---|---|
| ML 3011 | Adv Leadership I - change credit | 3(2,2) | 186 |
| ML 4010 | Org Leadership I - change credit | 3(2,2) | 188 |
| ML 3021 | Adv Leadership II - change credit | 3(2,2) | 190 |
| ML 4021 | Org Leadership II - change credit | 3(2,2) | 192 |

**C. Economics**

| | | | |
|---|---|---|---|
| ECON 4290 | Economics of Energy Markets - new course | 3(3,0) | 194 |

**D.** Sociology BS - change curriculum requirements — 201
Sociology BA - change curriculum requirements — 203

## V. College of Engineering and Science

**A. Chemistry**

| | | | |
|---|---|---|---|
| CH 2010 to 2011 | Survey of Organic Chemistry - change number | 1(0,3) | 205 |
| CH 3320 | Physical Chemistry - change prerequisites | 3(3,0) | 206 |
| CH 4030 | Adv Synth Tech - change prerequisites | 2(0,6) | 207 |
| CH 4110 | Instrumental Analy - change prerequisites | 3(3,0) | 208 |
| CH 4430 | Research Problems - change prerequisites | 1-6 | 209 |
| CH 4440 | Research Problems - change prerequisites | 1-6 | 210 |
| CH 1000 | Preparation of General Chemistry - new course | 2(2,0) | 211 |

**B. Computer Science**

| | | | |
|---|---|---|---|
| CPSC 1990 | Selected Topics - change prerequisites | 1-8 | 220 |
| CPSC 3990 | Selected Topics - change prerequisites | 1-8 | 221 |

**C. Mechanical Engineering**

| | | | |
|---|---|---|---|
| ME 2010 | Statics & Dynamics - change prerequisites | 5(3,4) | 222 |
| ME 3100 | Thermo/Heat Transfer - change prerequisites | 3(3,0) | 224 |
| ME 3070 | Founda Mech Syst - change prerequisites | 3(3,0) | 225 |
| ME 4250 | Aircraft Conceptual Design - new course | 3(3,0) | 227 |
| ME 4280 | Thermal-hydraulics of Nuclear Reactors - new course | 3(3,0) | 229 |
| ME 2040 | Mech of Materials - change description | | 231 |

**D. Chemical Bimolecular Engineering**

| | | | |
|---|---|---|---|
| CHE 1300 | Chemical Eng Tools - change prerequisite | 2(1,2) | 233 |
| CHE 2111 | Intro to Chem Eng - change prerequisite | 4(3,2) | 234 |

**E. Civial Engineering**

| | | | |
|---|---|---|---|
| CE 2010 | Statics - change prerequisite | 3(3,0) | 235 |

| | | | | |
|---|---|---|---|---|
| CE 2060 | Structural Mechanics - change prerequisite | | 4(3,3) | 236 |
| CE 2080 | Dynamics - change prerequisite | | 2(2,0) | 237 |
| CE 3510 | Civil Engineering Materials - change prerequisite | | 4(3,3) | 238 |

**F.  Environmental Engineering**

| | | | | |
|---|---|---|---|---|
| EES 2010 | Environ Engr Fundamentals I - change prerequisite | | 3(3,0) | 239 |
| EES 2020 | Environ Engr Fundamentals II - change prerequisite | | 4(3,3) | 240 |

**G.  General Engineering**

| | | | | |
|---|---|---|---|---|
| ENGR 1150 | Engineering Design & Modeling - new course | | 3(2,2) | 241 |
| ENGR 1160 | Engineering Graphics and Computer-Aided Design - new course | | 3(2,2) | 243 |
| ENGR 1200 | Engr Prob Siv - delete course | | | 245 |
| ENGR 1500 | Introduction to Engineering - new course | | 2(2,0) | 246 |
| ENGR 1510 | Engineering Skills - new course | | 2(1,2) | 248 |
| ENGR 1520 | Engineering Computer Skills - new course | | 2(1,2) | 250 |
| ENGR 1530 | Engineering Foundation Skills - new course | | 4(3,2) | 252 |
| ENGR 1640 | Engineering MATLAB Programming - new course | | 3(2,2) | 254 |
| ENGR 2100 | CAD & Engineering Application - change prerequisites | | 2(1,2) | 256 |

**H.  Industrial Engineering**

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|---|---|---|---|---|
| IE 4910 | Selected Topics - change prerequisites | | ? | 257 |

***The committee tabled the courses highlighted in grey.

1 May 2014

**MEMORANDUM**

**DEPARTMENT OF
BIOLOGICAL SCIENCES**
College of Agriculture,
Forestry & Life Sciences

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**TO:** Dr. Jan Murdoch, Dean of Undergraduate Studies

**FROM:** Dr. Robert Kosinski, Chair, CAFLS Curriculum Committee *R. Kosinski*

**SUBJECT:** Vote to remove the ePortfolio Graduation Requirement

Dr. Murdoch, this is to inform you that the CAFLS Curriculum Committee, in consultation with the CAFLS faculty, has voted to remove the requirement that every student must submit an ePortfolio in order to qualify for graduation. We would like this change to take effect after the May graduation. We envision possible future uses of the ePortfolio for General Education assessment, but we believe that the time has come to remove the individual graduation requirement.

| | |
|---|---|
| **From:** | Janice Murdoch |
| **Sent:** | Monday, April 28, 2014 10:44 AM |
| **To:** | Rhonda Todd |
| **Subject:** | FW: ePortfolio |

**From:** Robert Horton
**Sent:** Friday, April 25, 2014 4:00 PM
**To:** Janice Murdoch
**Cc:** Rhonda Todd; Gregory Ramshaw; James Satterfield; John Whitcomb; Karen Kemper; Robert Horton
**Subject:** ePortfolio

Jan, I didn't know we were supposed to report this directly to you prior to our meeting. Our HEHD Curriculum Committee was unanimous in supporting the decoupling of the ePortfolio from the graduation requirements.

Bob

*Bob Horton*
*Chair, HEHD Curriculum Committee*
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*Clemson, SC 29634-0705*
*Phone: 864.656.5127; Fax: 864.656.1322*

April 25, 2014

To: Dean Jan Murdoch

Chair, University Curriculum Committee

CC: Associate Dean Jeff Appling

From: Mike Coggeshall

Chair, College of Business and Behavioral Science Curriculum Committee

At the April Curriculum Committee meeting of the College of BBS on Friday, April 11, 2014, the department representatives had been asked by Dr. Larry Fredendall to vote on whether to remove the university's e-portfolio as a requirement for graduation for undergraduates.

The College unanimously supported the removal of the university's e-portfolio as a requirement for graduation for undergraduates.

# Recommendation to Eliminate the ePortfolio as a Graduation Requirement

Mark Smotherman
March 7, 2014

## Summary

The current ePortfolio program at Clemson is for most students and faculty a last-semester checkbox system rather than a student learning experience, a student placement help, an effective assessment tool, or a cost-effective use of resources. I believe that, in its current form, it creates little value for the students and is of little value to the faculty in guiding improvements in general education courses. Therefore, I propose to eliminate it as a graduation requirement for all students. A more useful and cost-effective assessment process could instead be implemented by sampling a subset of general education courses. If the university instead sees value in keeping the ePortfolio, the university should then make the necessary commitments and investments required to fully realize the benefits of such a program.

## Background

An ePortfolio program was established at Clemson for the Fall 2005 entering class based, at least in part, on the perception that "accrediting agencies are moving in the direction of requiring ePortfolios and we must act now to be prepared" [WEA05]. Starting with the December 2009 graduation, Clemson students were required to submit an ePortfolio in order to obtain a baccalaureate degree [CUG09]. Starting with the 2012-2103 edition, the Graduation Requirement section of the Undergraduate Announcements includes this language:

> All undergraduate students will complete the general education section of the Clemson
> University ePortfolio prior to the final semester before graduation. Completion of the general
> education section of the ePortfolio is a requirement for graduation.

Currently, a student must submit eight general education ePortfolio artifacts:

1. Arts and Humanities
2. Critical Thinking
3. Ethical Judgment
4. Cross-Cultural Awareness
5. Social Science
6. Natural Sciences
7. Mathematical Literacy
8. Science, Technology and Society

Details of the ePortfolio program are available at the web site
http://www.clemson.edu/academics/programs/eportfolio/.

backlog in scoring submissions that only artifacts for graduating seniors were scored[2]. I believe that this last-minute timing leads to more frustration than reflection among the graduating seniors and that we have caused many to leave Clemson on a sour note. For example, consider this comment from a 2013 satirical post about the Clemson ePortfolio process [BLA13]:

> A huge inconvenience, and the last thing seniors want to deal with when graduation is peeping around the corner, ePortfolio proves to be one of the most infuriating processes for students.

The current scoring procedure for the artifacts also raises questions about the quality of feedback received by students. Each of the eight artifacts is scored by other students and/or ePortfolio faculty members as follows[3,4] [CLE14]:

> GW - Groupwork – identify your role in the project and how it demonstrates the competency.
> FL - Document written in a foreign language; must be translated.
> 0 - Inappropriate artifact; must be replaced.
> 1 - The artifact doesn't meet the competency, but with some revision it may.
> 2 - The artifact is a good demonstration of the competency.
> 3 - The artifact is a very good demonstration of the competency.
> 4 - The artifact is an excellent demonstration of the competency.

If an artifact is student-scored at 2 or 3, no feedback beyond the single numeric score (2 or 3) is reported back [APP14]. Dr. Jeff Appling provided the following examples of feedback provided for scores of 0, 1, and 4:

> 0: This is behavioral science. Please use a lab report from a Gen Ed natural science course.
> 1: This does have some scientific content but it is limited. A lab report from a Gen Ed natural science course would likely score higher.
> 4: This is excellent work. [plus some comment specific to the actual artifact]

Additionally, each summer a thousand or more sampled artifacts are re-scored by paid faculty for actual use in the SACS report [RIN12,RIN13]; however, no feedback is provided from the re-scoring since the students have graduated.

Thus, between the initial scoring and the faculty-re-scoring, there is no quality feedback made available to students to encourage "deep learning and student engagement" or to engage the student in "continuous self-assessment and reflection".

These problems have been observed by Auburn University, which is starting an ePortfolio program as a SACS Quality Enhancement Program (QEP). Auburn is in fact using the Clemson program as described in 2011 *as a model of what to avoid*. The Auburn planning document contains the following critique of the Clemson program, based on Clemson student presentations at the 2011 Annual Southeast Conference of The Association for Authentic, Experiential and Evidence-Based Learning (AAEEBL) [AUB12]:

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[2] Dr. Appling tells me that more scorers have now been hired and that the submission queues have been cleared multiple times in the past year [APP14].

[3] In the past, the scoring has been done largely by other undergraduates. Currently, Dr. Appling reports that only four undergraduate scorers remain and that they are under his direct supervision [APP14]. The majority of scorers are now paid graduate students, and a faculty member rechecks each artifact that has been initially student-scored as 0 or 1.

[4] A grade of 0 is reported to the student as "IA".

Regarding artificially-low scores, Ring reports that in the faculty re-scoring of artifacts done in the summer of 2012, 57% "of all artifacts scored a 1 in content" [RIN13]. The intent of the scoring from 1-4 is described as follows:

> The bottom level, 1, represents unsatisfactory work. The upper level, 4, represents exemplary work. Thus only descriptions of levels 2 and 3 are necessary to set the scale. Level 3 represents work that meets general expectations of competency. Level 2 represents work that has components of reasonable performance, but is indicative of a student still developing skill or knowledge in that area.

For that year, a composite graduation score of 15 was required across the eight general education artifacts (i.e., a requirement of 2 or above assigned by student scorers on at least seven of the eight competencies). Thus, if the artifacts were randomly sampled across students who graduated and if the initial student scoring and faculty re-scoring of artifacts were similar, we would expect to see at most 12.5% of the artifacts re-scored as 1. Since the percentage is instead 57%, the graduation scoring appears to be overly generous[6].

For Spring 2014, I understand that Clemson is revising the graduation-scored minimum to a score of 1 for each artifact. Note that, by its own rubric communicated to the students, Clemson will now be saying that *none* of the required artifacts will need to meet the associated competency. Add to this the lack of an incentive to turn in quality artifacts early and the apparent generosity of graduation scoring; I believe the outcome can only be that the measurements of these artifacts will be useless as a representation of the state of general education at Clemson.

Because of the limitations of the current ePortfolio software system, the statistics of the sampled artifacts re-scored in summers are aggregated by college and competency and not by general education course. Further, descriptive statistics rather than distributions are reported, and, thus the most that can be said is on the order of [RIN13]:

> Science and Technology in Society (STS) received the highest average overall score of 2.1 across colleges, which was followed by Social Sciences (SS) (1.8). The average scores for Natural Science (NS), Mathematics (MA) and Critical Thinking were 1.6, while the average scores for Ethical Judgment (EJ) and Arts and Humanities (AH) were 1.5, and Cross Cultural Awareness 1.4.

If we were considering how to improve general education courses in, for example, Natural Science, this lack of specificity provides very little guidance. That is, should improvements be made in lower-level Astronomy, Biology, Chemistry, Geology, Physical Science, or Physics courses (i.e., those that count toward general education)? Which of these departments is doing well with general education topics, as defined by the scoring rubric, and which need to make improvements? Are the artifacts generated by students taking a particular general education course this year better than the artifacts generated in the previous year? The current ePortfolio program does not and cannot answer those questions, and thus I believe it is inadequate in guiding continual improvement in general education courses.

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[6] However, the reported artifact numbers by competency indicate a big skew — almost 23% of the re-scored artifacts were for the Critical Thinking competency while only 6% were for Cross Cultural Awareness — so, the sampling used for faculty re-scoring appears not to be random.

The sampling method used lays the foundation for the generalizability of the results. No one part of the University Studies curriculum, nor for that matter no one part of the university experience, is solely responsible for helping students to write well, think critically, or conduct responsible inquiry and analysis. These skills are practiced in many courses. Therefore, a matrix approach to sampling is taken, so that, over time, work products will be selected from all general education components that are aligned to each UNCW Learning Goal. Once courses are selected for sampling, section selection is done to insure a representative mix of course offerings (for example, by in class or distance methods, and by instructor type -- tenure-line, lecturer, or part time).

Based on my admittedly cursory review, I believe that Clemson could replace the current ePortfolio requirement with a sampling approach to assessing the student learning objectives for General Education without risking accreditation problems with SACS[9].

However, if Clemson wants to invest in a quality ePortfolio program, there are alternative approaches to assessment using ePortfolios. In one alternative, artifacts are generated in, and scored in, the general education courses themselves, at the time when the learning process can best be enhanced. Indeed, SUNY Stony Brook has adopted a course-based ePortfolio program, and their recommendations to instructors include [STO14]:

- Establish clear, measurable learning objectives for the course and/or project and develop learning outcomes and desired competencies from the objectives. Demonstrating learned integrative connections through reflection in an eportfolio must be one of the learning objectives and outcomes.
  ...
- The eportfolio MUST be a requirement for the successful completion of the course. Students will not start an eportfolio if it is an option. At this point, the eportfolio is an added assignment to them. The eportfolio requirement MUST be posted in the course/program description and syllabus. See ePortfolio Course Requirement for an example for posting in your syllabus.
  - o HINT: Make posting the assignment/project and reflection part of the steps to completion. Tell students you will not assign credit to the assignment until it's posted with reflection in the eportfolio. Make it clear, successful completion of the course or program depends on a completed eportfolio.
  ...
- Have your students create their eportfolios during the first two weeks of the semester. Do NOT wait until the end of the semester. This makes the ePortfolio Learning Process ineffective and the use of eportfolios pointless to the students.

Dr. Ring has expressed reservations about the consistency of scoring for such an approach, so the necessary scoring could be provided by the centralized ePortfolio staff [RIN14].

Another approach is to define a number of "gates" at various points in a student's academic progress at which time some subset of the competencies must be demonstrated. This was proposed by Lowenthal, White, and Cooley in 2011, when they reviewed the portfolio system at an unnamed university. I believe that their diagnosis of a poorly-functioning ePortfolio program has striking similarities to the current situation at Clemson [LOW11]:

It is easy in hindsight to identify why our portfolio method of assessing student learning was not working as well as it could have been. The portfolio became more of a box on a checklist that

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[9] Indeed, the re-scoring done in the summers is a sampling process used to prepare data for SACS.

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