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: February 24, 2015

SUBJECT: Administrative Approval of Curriculum Items

The Undergraduate Curriculum Committee met on February 6, 2015 to approve the attached curriculum/course changes received in the Office of the Provost, February 24, 2015. The purpose of this memorandum is to respectfully request that you review this information and concur by giving final signature approval.

APPROVED:

[Signature]

DR. DEBRA JACKSON, INSTITUTIONAL EFFECTIVENESS AND ASSESSMENT

[Signature]

DR. ROBERT JONES, VICE PRESIDENT FOR ACADEMIC AFFAIRS & PROVOST

/rft

C: File

Attachments
3/3/15

Bob,

Ok, thanks.

I think it's do to the limited number of

When we discuss mechanisms

used to manage enrollment

at the department level, we

are referring to the changes

made that influence our

native students' ability to

move between majors. A perfect

example was appeared in this

packet. I've marked the page.

Dorothy
AGENDA
University Undergraduate Curriculum Committee Meeting
Friday—February 6, 2015 —1:30 PM
E304 Martin Hall

I. Call to order

II. Introductions

III. Consideration of December meeting minutes

IV. New Business
   A. Proposed Change to Health Science
   B. Change to Social Science Rubric

V. Old Business
   A. Proposed General Education Assessment Protocol
   B. Internship Courses

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
University Undergraduate Curriculum Committee
Minutes Meeting
E304 Martin Hall
December 5, 2014, 1:30 PM

Members Present: Jeff Appling, chair; Joe Mazer, Graciela Tissera; N. Woolbright for Mike Coggeshall; Angela Morgan; Bob Kosinski; Cheryl Ingram-Smith; Mary Beth Kurz; Brian Dominy; Andy Tyminski; Hugh Spitler; Jan Comfort; Dereck Wilmott; Matt Abrams; Julie Pennebaker; Shannon Clark; Mary Huff; Sandy Linder; Zach Talley; David Knox; Gail Ring; Jan Murdoch and Rhonda Todd

Appling convened the meeting at 1:30 PM

Introductions
Appling welcomed the committee.

Approval of minutes
The committee approved the November meeting minutes.

Old Business
A. Proposed General Education Assessment Protocol – Appling reported visiting with the Scholastic Policies Committee who seemed to have never heard about this proposal. He recommended that everyone have more discussions within the college and department levels about this proposal. The committee discussed issues with faculty oversight of uploading the student work, sampling model and workload.

Ring stated that she was working on small scale test, and was hoping to get at least three more volunteers to have a good representation for all the course competencies. She reported the sampling so far was about 20 minutes, and the only time issue was giving student access to the system. Someone suggested taking 30 minutes at the end of a class period. Mazer stated that he was in favor of the pilot for spring semester, but more communication is needed at the department level. Kurz expressed concern that most of the burden will be on AAH. Appling stated that it is important to know if people see this as a working model or locked in model. He stated that discussions need to happen at the college meetings and department chairs meeting.

B. 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 – Mack reported that the STS subcommittee recommends approval of ENGR 2200 for STS credit. The committee approved.
f. Ethical Judgment – Dan Wueste
g. Critical Thinking – Sarah Winslow
h. Communication – Cameron Bushnell

C. Curriculum/course approval – See attached
Other Business

Murdoch reported that Abrams had asked her to discuss with this committee about allowing students who double major to use each major as the minor of the other program, even in situations when one of the majors actually does not include the minor. Hamby explained that they do not check for minors, and double majors take the place of any minor requirement. When a student is getting a dual degree, the minor must be fulfilled if it is a requirement. The committee discussed the difficulty with monitoring, and creating a policy for such a change.

Abrams stated that Student Government would like to have a student representative on the college level curriculum committees. He stated that he would contact each college chair for feedback.

The meeting adjourned at 3:49 PM.

Minutes respectfully submitted by Rhonda Todd
PROPOSAL

TO: the University Undergraduate Curriculum Committee

FROM: Bob Kosinski, Biological Sciences and Chair of the CAFLS Curriculum Committee

SUBJECT: Revision of 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 providing students Gen Ed competencies. The Undergraduate Curriculum Committee (UCC) seems to be leaning towards requiring Gen Ed courses to contain assignments that could demonstrate a competency and having the resulting artifacts submitted to a repository for later faculty evaluation. The emphasis of this effort is programmatic assessment, not assessment of individual students or instructors.

However, this means that more responsibility will shift to 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.

Following extensive discussion with UCC members on 7 November, I suggest that the UCC should approve the following six policies:

a) Gen Ed faculty (faculty teaching courses listed on pp. 37-38 of the 2014-2015 Announcements) need to be aware of the requirements of the competencies covered by their courses;

b) To maintain its Gen Ed status, a Gen Ed course or its laboratory component must give at least one assignment that demonstrates the competency covered in the course. This assignment should be named in the course syllabus (see syllabus example on next page);

c) This assignment should be designed so it is consistent with the published Gen Ed competency and its evaluation rubric (see the attached examples for Natural Sciences and Mathematics);

d) The faculty member teaching the Gen Ed course should give each assignment its normal grade within the course, and then these 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) Evaluators would be faculty volunteers recruited University-wide each summer and given training in the rubric so they produce valid and unbiased assessments;

f) A section of a course might be selected for evaluation only every several years, but in the years it is selected, every competency assignment from the section would be assessed.

The UCC also seemed to be in favor of a pilot implementation (using volunteer Gen Ed faculty) in the spring of 2015. There was also the beginning of a discussion about establishing a Gen Ed Committee with heavy representation of Gen Ed faculty.
Example of a Gen Ed Paragraph Included in a Syllabus

**GEN ED COMPETENCY:** All Clemson students must demonstrate achievement of the General Education "competencies," listed on pp. 37-38 of the 2014-2015 Announcements. BIOL 1110 teaches the Natural Sciences 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.

In the BIOL 1111 lab, you will write two lab reports and a library research paper according to directions in a Writing Guide you will download. The second lab report (on plant nutrient deficiency) will be part of your lab grade, but will also be submitted to a repository when the course is finished. Evaluators will use it to estimate how well the course is teaching the Natural Sciences competency. This evaluation will have no effect on your grade and will involve no extra work for you. However, if you do the paper according to the Writing Guide directions, your paper should demonstrate good mastery of the Natural Sciences competency.
Example of Information Sent to a Mathematics Gen Ed Faculty Member

Text of the competency:

*Demonstrate mathematical literacy through solving problems, communicating concepts, reasoning mathematically, and applying mathematical or statistical methods, using multiple representations where applicable.*

A successful artifact in general mathematical analysis will:

- Correctly use algebraic and geometric transformations and logic, including those embedded in multistep problems;
- Correctly translate between mathematical language and lay language.

OR

- Correctly present and apply a mathematical technique to a real world problem discussed in the specific mathematical area under study;
- Correctly translate between mathematical language and lay language.

A successful artifact in statistics will:

- Correctly identify variables and the relationships among them;
- Use appropriate statistical methods to describe quantitative data observed or generated from these variables;
- Correctly present numerical, graphical, and algebraic representations of these data.

Further tips to the instructor:

- The student must *perform mathematics* in order to demonstrate this competency. The mere discussion of quantitative data will not be sufficient.
- The artifact must describe the context in which the mathematical work is being presented.
- The artifact should present a mathematical relationship (an equation or graph) with definitions of relevant symbols.
- A solution based on manipulating equations or considering statistics should be presented.
- The artifact should interpret the results of the mathematical or statistical work.
- Notes on some common types of artifacts:
  a) A hypothetical mathematical problem could be acceptable if the student describes the context and explains the process used in reaching the solution.
  b) Excel spreadsheets will not qualify unless the student includes explanations of the math and interpretation of results.
  c) Mathematics exams could be sufficient provided that step-by-step calculations are shown, and they include written interpretation of results.
  d) Research papers with statistical calculations are acceptable for this competency, but the calculations must be shown and discussed.
  e) Input/output from statistical software must be presented as a Word file or PDF so that assessors can open the file. Also, the artifact must include explanations of the mathematics and interpretation of results.
Example of Information Sent to a Natural Sciences Gen Ed Faculty Member

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.
Timeline of General Education Assessment

2003  Successful reaccreditation by SACS
2004  Last year Gen Ed C.O.W. requirements appear in the Announcements
       Faculty Gen Ed task force revises Gen Ed requirements, expands competencies beyond C.O.W.
       Gen Ed task force creates 22 competencies
       Gen Ed task force plans for students to create an ePortfolio to allow collection of artifacts
2005  List of 22 Gen Ed competencies appears in the Announcements
       Ad hoc faculty committee formed to create assessment rubrics for Gen Ed competencies
       ePortfolio faculty task force selects Blackboard for collection of artifacts
       CCIT begins ePortfolio programming in Blackboard
       ePortfolio faculty task force recommends a graduation requirement
       UUCC approves undergraduate ePortfolio graduation requirement
2006  ePortfolio task force recommends formative assessment plan to provide student feedback
       Ad hoc faculty/student committee designs CI team-based ePortfolio formative assessment
2007  ePortfolio Director hired
       Faculty form CI teams and develop training protocols for ePortfolio artifact evaluation
       Only faculty evaluators are allowed to assign failing scores
2008  UUCC revisits competencies, faculty vote to reduce the number to 19
       In response to economic pressures, faculty Gen Ed task force is created
       Blackboard upgrade crashes ePortfolio programming
       New artifact collection program created, CUEPort
       First faculty formative assessment of ePortfolio artifacts held in summer (yearly henceforth)
2009  Gen Ed task force recommends removal of Advanced Writing requirement, approved by UUCC
       Gen Ed task force recommends new theme-based Gen Ed structure (not considered by UUCC)
       List of 19 Gen Ed competencies appears in the Announcements
       Summer assessment faculty evaluators recommend reduction to eight Gen Ed competencies
       UUCC approves eight Gen Ed competencies
       First undergraduates held to ePortfolio graduation requirement (Fall, around 200 transfers)
2010  List of eight Gen Ed competencies appears in the Announcements
       Communication, Ethical Judgment, and Critical Thinking are distributed competencies
       Students provide artifacts for EJ and CT, all artifacts are evaluated for Communication
       Programs identify courses in which distributed competencies are evaluated
       Programs update Gen Ed checklists to include assessment of distributed competencies
2011  Summer assessment faculty evaluators recommend changes to A&H competency
2012  UUCC discusses but does not change A&H competency
       SACS rejects Academic and Professional Development (2 cr) as Gen Ed
2013  Double dipping only allowed as long as 31 cr of Gen Ed courses are completed
       Formative assessment CI students are replaced with non-undergraduate ePortfolio evaluators
2014  UUCC approves elimination of ePortfolio graduation requirement
       Provost selects faculty committee to review assessment of Gen Ed
       UUCC proposes collection of Gen Ed artifacts through sampling of course sections (pending)
Dear Dr. Appling & Rhonda,

I am writing to request a change in the undergraduate catalog as outlined in the attachment. The requested change is designed to align student expectation with current practice by not setting false hopes and reducing student (and parent) disappointment. I realize that the attachment is counter to mandates by previous Provost Helms, but from my vantage point is the right thing to do.

FYI – this year we had 140 requests for change of major and we could only accommodate less than 50% of these. The minimum GPA for accepted pre-professional students was 3.5 and 3.1 for our other concentrations. The attachment is currently with Interim Dean Wright for his endorsement and will be coming to you after. I am hopeful to receive the endorsement this afternoon or tomorrow morning.

Thank you,
Ron

Ron Gimbel, PhD
Chair, Department of Public Health Sciences
Clemson University
rgimbel@clemson.edu
(864) 656-1969 – phone
(864) 656-6227 - fax
Current Undergraduate Announcements:

HEALTH SCIENCE
Bachelor of Science
The Department of Public Health Sciences prepares students for careers in the health field, one of the largest industries in the United States. It includes hospitals and other medical service providers, public health organizations, health insurance companies, health/medical related sales, health fitness organizations, and community and nonprofit health agencies. Plans of study can be arranged in health promotion and education, health services administration, leadership for cardiovascular technology, and preprofessional health studies. Students in the Health Promotion and Education Concentration have the skills to assess, plan, communicate, implement, manage, and evaluate public health promotion programs. Students in the Preprofessional Health Studies Concentration obtain the coursework and experience necessary for acceptance into various graduate programs in clinical health professions. The Cardiovascular Imaging Leadership Concentration provides a core of health science classes, training in diagnostic cardiovascular sonography, and a leadership certificate. The Health Services Administration Concentration allows students to develop skills and competencies in health administration/management for entry-level careers or graduate study in this area. A minor in Business Administration is integral to the concentration. The department, in cooperation with the College of Architecture, Arts and Humanities, also offers a joint Bachelor of Science degree in Language and International Health (see pages 68-69).

When space is available, students with fewer than 50 credit hours earned may apply to change majors into Health Science with a minimum cumulative grade-point average of 2.25. Students with 50 or more credit hours may apply for a change-of-major into Health Science when space is available based on the following restrictions:

• completion of the Health Science Mathematics and Statistics Requirements and the General Education Natural Science Requirement
• minimum cumulative grade-point average of 2.5
• submission of a 1–3-page document detailing why the applicant desires to major in Health Science and how this major would support his/her career goals. Additional information is available at www.hehd.clemson.edu/PublicHealth/index.htm.
Proposed Change:

HEALTH SCIENCE
Bachelor of Science
The Department of Public Health Sciences prepares students for careers in the health field, one of the largest industries in the United States. It includes hospitals and other medical service providers, public health organizations, health insurance companies, health/medical related sales, health fitness organizations, and community and nonprofit health agencies. Plans of study can be arranged in health promotion and education, health services administration, leadership for cardiovascular technology, and preprofessional health studies. Students in the Health Promotion and Education Concentration have the skills to assess, plan, communicate, implement, manage, and evaluate public health promotion programs. Students in the Preprofessional Health Studies Concentration obtain the coursework and experience necessary for acceptance into various graduate programs in clinical health professions. The Cardiovascular Imaging Leadership Concentration provides a core of health science classes, training in diagnostic cardiovascular sonography, and a leadership certificate. The Health Services Administration Concentration allows students to develop skills and competencies in health administration/management for entry-level careers or graduate study in this area. A minor in Business Administration is integral to the concentration. The department, in cooperation with the College of Architecture, Arts and Humanities, also offers a joint Bachelor of Science degree in Language and International Health (see pages 68-69).

Entrance Requirements
To facilitate admission of students who can achieve at an appropriate level in the program, admission is selective. Applicants are reviewed by the Office of Admissions and consideration is given to performance in secondary school and on the College Board Examination (SAT). Those seeking admission are advised to apply to the University early in the fall of the senior year in high school.

Transfer admission is competitive. Students are encouraged to apply early to the Office of Admissions. The University admits ten new transfer students to the Public Health Science major during the fall semester only. Potential students should have a minimum grade point average of 3.0 and completion of 30 semester hours of transferable courses. Placement in the Public Health Science curriculum will be determined after credit evaluation is completed.

Students may apply to change majors into Public Health Science with decisions based on available space and approval by the Department of Public Health Science Advisory Committee. Applications are accepted in the Fall semester starting on the first day of class with a deadline of the last day of classes. Accepted change-of-major students must be signed into the program by the academic advisor. Applicants should meet the following requirements: minimum cumulative grade-point average of 2.25 with 49 or fewer earned credits or 2.5 with 50 or more earned credits. Students with 50 or more earned credits must also have taken and passed the math requirement, statistics requirements, and science requirement per the general education requirements in the Undergraduate Catalog. Students are allowed to apply only twice. Detailed information is available in the Academic Advising Center in 309 Edwards Hall.
Social Science Competency with Rubric: Describe and explain human actions using social science concepts and evidence.

<table>
<thead>
<tr>
<th>Description</th>
<th>Does not meet competency</th>
<th>Satisfactory</th>
<th>Explained well</th>
<th>Exemplary</th>
</tr>
</thead>
<tbody>
<tr>
<td>Explanation</td>
<td>Does not meet competency</td>
<td>Satisfactory</td>
<td>Explained well</td>
<td>Exemplary</td>
</tr>
</tbody>
</table>

"Describe" would involve any appropriate method for the social sciences.

"Explain" would involve any causative means appropriate to a social science. Students might be asked to use theories for explanation, to interpret mathematical models or statistical tables, to review historical antecedents to explain events, or apply concepts (such as culture) to explain why people act the way they do.

"Human actions" may be interpreted as broadly as possible, within the frame of the social sciences. Such actions might include (but not be limited to) actions of individuals, collectivities, cultures, nations, or world systems, both past and present.

Social Science "concepts" would be those appropriate to a particular social science discipline (e.g., culture, social inequality, gender, political or economic behavior) and "evidence" includes anything collected by social science methods (e.g., observations, statistical data, experiments, interviews, historical records).

Examples of artifacts to support the competency would include
Internship Courses: Information for Curriculum Committees

Recent issues have come up related to internship courses and the costs involved. Various offices have received complaints from students and parents about unpaid internships taken in the summer that require the payment of tuition. This becomes an even greater concern when the internship is required by the major. Some departments are solving this issue by having students sign up for credit in the following fall semester so that the tuition cost is absorbed in their full time bill (i.e., the course activity and credit are disjointed). For elective internships, some departments counsel students to sign up for the course credit only if they want to pay tuition (in the summer) and have the internship appear on the transcript.

The University Undergraduate Curriculum Committee has discussed the issues above and would like departmental curriculum committees to consider options that could help improve internship experiences while alleviating cost concerns. Departments might choose to alter their current format, using the options presented below as a starting place for discussion.

1. Courses currently offered as variable credit 1-3 can be made variable credit 0-3 so that students could sign up for zero credits in the summer and not be required to pay tuition;
   - Some departments may not have considered a zero-credit version of internships, which is a good option when course credits are not required for completion of the degree.
   - Zero-credit courses as indicators of internship participation parallel the use of zero-credit courses for Cooperative Education and Study Abroad.

2. The Career Center offers two zero-credit internship courses, INT 1010 and 2010, that can be used for students in the summer, spring or fall (INT 2010 maintains full-time enrollment status during spring and fall semesters). Departments could combine these with follow-up courses as in #3.

3. Some departments have students take a zero credit course during the term of the internship and then take a credit-bearing course during the following semester. The pedagogical content of the follow-up course, typically offered in the fall, is geared toward the shared experiences of the class.

We realize that some of these options might require course or curriculum changes and are easier to implement for elective internships. But it would be worth the effort if departments could reconsider their approach with cost in mind and make changes that improve the internship experience for their students.

For information on unpaid internships from the U.S. Department of Labor, see http://www.dol.gov/whd/regs/compliance/whdfs71.pdf
Good morning,

As a matter of information, I wanted to let you know that the attached change to Health Science was approved at the Academic Council meeting this past Monday, April 20, 2015. If you need additional information, please let me know.

All smiles,
Rhonda

-----Original Message-----
From: e101martin@clemson.edu [mailto:e101martin@clemson.edu]
Sent: Wednesday, April 22, 2015 10:26 AM
To: Rhonda Todd
Subject: Message from "RNP00267391E8C1"

This E-mail was sent from "RNP00267391E8C1" (MP C3503).
Scan Date: 04.22.2015 10:26:19 (-0400)
Queries to: e101martin@clemson.edu
| I. College of Health and Human Development |  |
| A. Institute on Family and Neighborhood Life |  |
| FCS 2010 *Human Rights Law - new course | 2 |
| B. Nursing |  |
| NURS 3610 Leadership and Collaboration in Global Health | 3(3,0) 5 |
| NURS 3620 Field Experience in Low Resource Country: Guatemala | 3(0.3) 7 |
| NURS 3600 Social Determinants of Health in Low Resource Countries | 3(3,0) 9 |
| Certificate approved by BOT 2/5/2015 |  |
| C. Health Science |  |
| HLTH 3010 **Fieldwork in Health Careers - new course | 3(3,0) 10 |

| II. College of Engineering and Science |  |
| A. Electrical Engineering |  |
| ECE 4370 Microelectromechanical Systems - new course | 3(3,0) 14 |

| III. College of Architecture, Arts and Humanities |  |
| A. Modern Languages |  |
| FR 4000 Modern French Literature - change prerequisites | 3(3,0) 16 |
| B. Middle Eastern Studies - add minor | 18 |