Institute Undergraduate Curriculum Committee
Appeals and Academic Matters (Full Committee)
Tuesday, March 22, 2011

Present: Riley (ECE), Pikowsky (REG), Montoya (BIOL), Agrawal (ChBE), Loss (MATH), Senf (LCC), Isbell (CoC), Ferri (ME), Benkeser (BMED)

Visitors: Laros (REG), Howson (REG), Paraska (VPFAD), Hicks (PUBP), Budd (ID), Rix (CEE), Sankar (AE), Yaszak (LCC)

N**ote:** All action items in these minutes require approval by the Academic Senate. In some instances, items may require further approval by the Board of Regents or the University System of Georgia. If the Regents' approval is required, the change is not official until notification is received from the Board to that effect. Academic units should take no action on these items until USG and/or BOR approval is secured. In addition, units should take no action on any of the items below until these minutes have been approved by the Academic Senate or the Executive Board.

Academic Matters

1. A motion was made to approve a request from the School of Civil and Environmental Engineering for new courses and a course deactivation. The motion was seconded and approved.

   NEW COURSES:
   CEE 4406: Applied Geotechnics 3-0-3
   CEE 4650: Site Development Planning and Design in Transportation 3-0-3

   DEACTIVATE COURSE: CEE 4410

2. A motion was made to approve a request from the School of Industrial Design for a new course. The motion was seconded and approved

   NEW COURSE:
   ID 4210: Intro Universal Design 3-0-3

   This course will be listed as equivalent to ID 6800 which will be jointly taught with ID 4210.

3. A motion was made to approve a request from the School of Industrial and Systems Engineering for a degree modification. The motion was seconded and approved.

   DEGREE MODIFICATION: Bachelor of Science in Industrial Engineering

   Current curriculum:
   CS 1371 Computing for Engineers (in MatLab) 3 hours

CS 1316 Representation Structure and Behavior 3 hours

Replace with new curriculum:

CS 1301 Introduction to Computing 3 hours
CS 2316 Data Manipulation for Science and Industry 3 hours

Problems in current line up

- Three CS courses are in different computer languages (CS 1371, 1316, and 4400)
- MatLab is often not available for IEs on the job and it is expensive
- CS 4400 classes are theoretical. The project requires programming; most IEs are not prepared for and have a way out, and therefore, do not learn. (Currently working with CS to make it more effective or eliminate)

This change will not affect the total hours required for the BSIE degree. These courses are required courses for all BSIE students; therefore, this change will be for all the BSIE tracks/concentrations.

4. A motion was made to approve a request from the School of Public Policy for a new course and a certificate deactivation. The motion was seconded and approved.

NEW COURSES:
PHIL 3135: Philosophy of Technology 3-0-3

Discussion at the meeting included creation of the PHIL subject code. After the meeting, it was verified that although we have not taught classes with the PHIL subject code, it was actually created in Banner in 1998 and was approved at the January 28, 1998 IUCC meeting. Therefore, the subject code of PHIL already exists and all that needs to be done is to have the NCPs completed for all the courses that need to be changed.

DEACTIVATION OF CERTIFICATE: Certificate in Leadership

The Certificate has been replaced with a Minor in Leadership Studies. The Minor was not based upon the Certificate; it is an entirely new program. Certificate students already in the program will be grandfathered in and their certificates will be awarded (only one student has been identified as currently pursuing this certificate).

5. A motion was made to approve a request from the School of Mathematics for a prerequisite change and a new course description. Although no objections were recorded as the vote was taken, concerns were emerging in a sidebar conversation about how much a course description change without it being a new course and needing a new course number.

The details of the request were:

PREREQUISITE MODIFICATIONS: MATH 4755 Mathematical Biology

Current prerequisites: MATH 1502 or 1512 or (15X2 and 1522)

New prerequisites: MATH 2403 or 2413 or 24X3

This course is coded as equivalent to BIOL 4755 Mathematical Biology which currently has prerequisites of CS 1321 and BIOL 3332 and (MATH 1502 or 1512) or (15X2 and 1522) and is crosslisted with MATH 4755.

After the meeting, it was noted that the part about the course description was not discussed even though it was on the sheet of information that was provided. The focus was on the prerequisite change, and not on the course description. After reviewing all of the information provided, it now seems that the actual course description itself should have been discussed. The Registrar's Office will follow up with the School of Mathematics and bring issues back to the IUCC for clarification or follow-up action if needed.

6. A motion was made to approve a request from the College of Computing for a degree modification. The motion was seconded and approved.

   DEGREE MODIFICATION: Bachelor of Science in Computer Science

   Please CHANGE the wording on the back page of the 8-semester plans for the four Thread combinations listed below to contain the following statement"**Required Thread Pick – If the same course is used to meet two Required Thread Picks, then three additional hours of free electives are required."*

   (1) Devices & Intelligence
   (2) Devices & People
   (3) Information Internetwork & People
   (4) Intelligence & People

   The change is necessary because in some thread combinations, one course can be used to satisfy two required pick categories. Originally, it was indicated that when this occurred, the student must take a thread elective to replace the hours, but this was incorrect for four combinations where the maximum allowable free elective hours had not been met. If the maximum allowable free elective hours for a combination have not been met, then the student should be allowed to take the additional hours as free electives instead of thread electives. This situation occurs in the four combinations listed above.

7. A motion was made to approve a request from the School of Biomedical Engineering for a degree modification, new courses, and prerequisite changes. The motion was seconded and approved and no objections or concerns were recorded for the prerequisite changes.

   DEGREE MODIFICATION: Bachelor of Science in Biomedical Engineering

   Delete the following courses from the required curriculum
   LCC 3403 (3 hrs)
   ECE 2025 (4 hrs)
   BIOL 1510 (4 hrs)

CHEM 3511 (3 hrs)
BMED 4600 (2 hrs)
BMED 4601 (3 hrs)

Create the following new courses
BMED 4602 Capstone Design (3 hrs)
BMED 4603 Advanced Biomedical Engineering Design (3 hrs)
(Note: BMED 4602 will be a required course, while BMED 4603 will be BME Depth Elective Course.)

Replace 3 hours of free electives with 15 hours of "Breadth Electives." These electives must be satisfied through the attainment of a minor, certificate (plus 3 hours of free electives), Research Option (plus free electives), or a Pre-med Option (i.e. CHEM 1212/2312/2380/[3511or4511] + 3 hours of free electives). Note that pre-med students will be allowed to continue to substitute CHEM 2311 for CHEM 1315.

Rename "BME Technical Electives" to "BME Depth Electives" and increase the number of hours required from this list of courses from 9 to 12 hours. These electives include BMED 2699, and all 3000- and 4000-level elective BMED courses. Undergraduate research courses (i.e. 2699/4699) taken from other schools addressing biomedical engineering related research will count towards these electives if approved by the BME Associate Chair for Undergraduate Studies. A maximum of 6 hours of undergraduate research can be applied towards satisfying Depth Electives. If the Research Option is used to satisfy Breadth Electives, undergraduate research cannot be used to satisfy depth electives.

Remove the ethics and economics constraints applied to the selection of courses used to satisfy the social science elective requirements.

Remove minimum grade of *C* requirement for CS 1371

The proposed changes are in response to the new Georgia Tech strategic plan's challenge to provide increased opportunities for interdisciplinary education through flexible, student-focused curricula. This is proposed to be accomplished through the deletion of a few required courses whose subject matter could be incorporated into other courses in the required curriculum, and the reduction of the required senior design experience from two courses to one. The process of revising the curriculum was informed by data obtained from the fall 2010 alumni survey, student focus groups, and faculty. The BME Undergraduate Committee, faculty and Student Advisory Board have reviewed and approved the proposed changes.

The proposed changes create a new category of electives, i.e. Breadth Electives (15 hrs), and reduce the total number of hours required for the degree from 132 to 131.

NEW COURSES:

BMED 4602: Capstone Design	1-6-3
BMED 4603: Advanced Design	1-6-3

PREREQUISITE MODIFICATIONS:

BMED 1300: prerequisite – BMED 1000
BMED 3100: prerequisite – CHEM 1315 OR CHEM 2311 OR Junior Standing*
BMED 3110: prerequisites – BMED 3100* and BMED 3400 and (BMED 2400 OR CEE/ISYE/MATH 3770)*
BMED 3510: prerequisites – PHYS 2212 and MATH 2403 and BMED 3100
BMED 3600: prerequisites – BMED 3100

*prerequisite with concurrency [Note: During the meeting, the Registrar's Office pointed out that it is not possible to enforce Junior Standing as a prerequisite. The School of Biomedical Engineering seemed to come to the conclusion that this could be monitored in other ways, even if Banner cannot actually enforce it. Leaving the Junior Standing notation as a prerequisite would at least inform the student and the advisors what the preferred order of the course should be in the program (taken in the junior year).

Further discussion at the meeting regarding another question was about using the Restriction form in Banner to restrict courses either at the Catalog level or Section level for junior standing. This would serve the same purpose, more or less, as a prerequisite of junior standing but would have the disadvantage of not being able to be overridden by the School for students they approve to be in the class. They would have to work with the Registrar's Office to override registration for any student not a junior that they wanted in the class. The Registrar's Office will follow up with BMED to determine if they wish to consider this as an alternative, or whether they wish to leave it as an unenforceable prerequisite in Banner.]

8. A motion was made to approve a request from the School of Aerospace Engineering for new courses and prerequisite changes. The motion was seconded and approved and no objections or concerns were recorded for the prerequisite changes.

NEW COURSES:

AE 3090: Numerical Methods for AE 2-3-3
Prerequisites: CS 1371 and MATH 2403 and AE2020

AE 4370: Life Cycle Cost Analysis 3-0-3
Restriction: Junior or higher standing

AE 4701: Wind Engineering 3-0-3
Prerequisites: Math 2401 and Phys 2211

PREREQUISITE MODIFICATIONS:

	Current requirement:	**Requested Change:**
AE 3021	Undergraduate Semester level AE 2020 Minimum Grade of D and Undergraduate Semester level AE 3450 Minimum Grade of D	Undergraduate Semester level AE 2020 Minimum Grade of C and Undergraduate Semester level AE 3450 Minimum Grade of D

AE 3310	Undergraduate Semester level AE 2020 Minimum Grade of D and (Undergraduate Semester level MATH 2403 Minimum Grade of C or Undergraduate Semester level MATH 2413 Minimum Grade of C or Undergraduate Semester level MATH 24X3 Minimum Grade of C)	Undergraduate Semester level AE 2020 Minimum Grade of C and (Undergraduate Semester level MATH 2403 Minimum Grade of C or Undergraduate Semester level MATH 2413 Minimum Grade of C or Undergraduate Semester level MATH 24X3 Minimum Grade of C)
AE 2220	(Undergraduate Semester level MATH 2403 Minimum Grade of C or Undergraduate Semester level MATH 2413 Minimum Grade of C or Undergraduate Semester level MATH 24X3 Minimum Grade of C) and Undergraduate Semester level COE 2001 Minimum Grade of D	(Undergraduate Semester level MATH 2403 Minimum Grade of C or Undergraduate Semester level MATH 2413 Minimum Grade of C or Undergraduate Semester level MATH 24X3 Minimum Grade of C) and Undergraduate Semester level COE 2001 Minimum Grade of C
AE 3515	Undergraduate Semester level AE 2220 Minimum Grade of D and (Undergraduate Semester level MATH 2403 Minimum Grade of C or Undergraduate Semester level MATH 2413 Minimum Grade of C or Undergraduate Semester level MATH 24X3 Minimum Grade of C)	Undergraduate Semester level AE 2220 Minimum Grade of C and (Undergraduate Semester level MATH 2403 Minimum Grade of C or Undergraduate Semester level MATH 2413 Minimum Grade of C or Undergraduate Semester level MATH 24X3 Minimum Grade of C)

9. A motion was made to approve a request from the School of Literature, Communication, and Culture for a degree modification, a minor modification, and a change to the descriptions of two active courses. The motion was seconded and approved.

DEGREE MODIFICATION: Bachelor of Science in Science Technology and Culture

Add: PST 3105 ETHICAL THEORIES to list of "ethics electives" and "other requirements" course lists. This change will be reflected in both the general catalog description of "STAC requirements and electives" and in the general catalog "degree requirements" listings

LCC has required STAC students to take an ethics course (either PST 3115 Philosophy of Science or PST 3127: Science, Technology, and Human Values) in fulfillment of degree requirements since the inception of the STAC degree. Therefore, adding one more elective class option to the BS in STAC "ethics electives" and "other requirements" course lists will not require any redistribution of course requirements. No other changes are requested, and the total required basic distribution credit hours remain at 59.

MINOR MODIFICATION: Women, Science, and Technology

The LCC Undergraduate Curriculum Committee, with the endorsement of the LCC Executive Committee and LCC faculty, proposes to strategically revise the catalog text for the WST minor description and the WST minor checklist. These are non-substantive changes designed to eliminate errors that have crept into the catalog text over the course of several years.

The Women, Science, and Technology (WST) program does what no other gender studies program does: it links science and technology issues to those issues more traditionally associated with women's studies. The WST minor prepares Tech students (women and men majoring in engineering, science, social sciences, and humanities) to live and work in an increasingly diverse world. The minor helps students develop their understanding of the human side of science and engineering involving not only gender issues, but inequalities of race and class as well.

To help students understand the requirements of the WST minor, we propose the following changes:

1. Revise the third paragraph of the current catalog text for the WST minor. Right now paragraphs 3 and 4 are the same—both describe the electives that students can take to fulfill the WST minor, but neither describes the required classes they must take to complete this minor. We propose to rewrite paragraph 3 so it conveys accurate information about required classes for the WST minor, as described on the WST checklist. (See the amended catalog text below.)
2. Change "The four elective courses" in paragraph 4 of the current catalog text for the WST minor to "The three elective courses." This will create consistency with the first part of paragraph 4 and eliminate confusing about how many elective classes students need to take for this minor. (See the amended catalog text below.)
3. For the WST degree checklist: delete "PUBP 4803" from the list of classes in IA because it is a special topics class that doesn't always have a gender focus. (See the amended degree checklist below.)
4. For the WST degree checklist: In IB, Change "four" to "three" for consistency and accuracy. (See the amended degree checklist below.)

No other changes are requested. The total required credit hours remains at 15.

GT Catalog : Public Policy : Women, Science, and Technology ...
http://www.catalog.gatech.edu/colleges/cola/pubp/ugrad/wst.php

WOMEN, SCIENCE, AND TECHNOLOGY - MINORS AND CERTIFICATES
The Women, Science, and Technology (WST) program does what no other gender studies program does: it links science and technology issues to those issues more traditionally associated with women's studies. The WST minor prepares Tech students (women and men majoring in engineering, science, social sciences, and humanities) to live and work in an increasingly diverse world. The minor helps students develop their understanding of the human side of science and engineering involving not only gender issues, but inequalities of race and class as well.

WST courses reflect on the theoretical and practical dimensions of diversity. Students are encouraged to explore the values associated with scientific culture and to learn to synthesize knowledge across the disciplines, while viewing science and engineering as social and cultural forces that shape relations among women and men.

Each minor also chooses three (3) courses from the following list OR from the list above. The three elective courses must be offered by at least two different Ivan Allen College schools: [Delete]

Each minor is required to choose two courses from the following list. The courses must be from two different schools: LCC 3304, HTS 3020, HTS 3021, PUBP 4212, PUBP 4214. [Add as replacement for deleted text above.]

Each minor also chooses three (3) courses from the following list OR from the list above. The four [delete] three [add] elective courses must be offered by at least two different Ivan Allen College schools:

HISTORY, TECHNOLOGY, AND SOCIETY
HTS 2082 Technology and Science in the Industrial Age
HTS 2084 Technology and Society
HTS 3007 Sociology of Work, Industry, and Occupations
HTS 3016 Women and Gender in the United States
HTS 3017 Sociology of Gender
HTS 3051 Women and Gender in the Middle East
HTS 3082 Sociology of Science
HTS 3083 Technology and American Society
HTS 3084 Culture and Technology
HTS 3086 Sociology of Medicine and Health

LITERATURE, COMMUNICATION, AND CULTURE
LCC 2100 Introduction to Science, Technology, and Culture
LCC 2200 Introduction to Gender Studies
LCC 3212 Women, Literature, and Culture
LCC 3219 Literature and Medicine
LCC 3225 Gender in the Disciplines
LCC 3302 Science, Technology, and Ideology
LCC 3306 Science, Technology, and Race
LCC 3308 Environmentalism and Ecocriticism
LCC 3316 Science, Technology, and Postmodernism
LCC 3318 Biomedicine and Culture

PUBLIC POLICY
PUBP 2012 Foundations of Public Policy
PUBP 4410 Science, Technology, and Public Policy
PUBP 4416 Critical Issues in Science and Technology
PUBP 4200 Social Policy Issues
PUBP 4214 Gender, Science, Technology, and Public Policy

INTERNATIONAL AFFAIRS:
INTA 4803/8803 Gender in International Relations

MODERN LANGUAGES:
SPAN 3241 The Individual and the Family in Hispanic Literature
SPAN 3242 Society in Hispanic Literature

ECONOMICS:
ECON 2100 Economic Analysis and Policy Problems
ECON 2101 The Global Economy
ECON 2105 Principles of Macroeconomics
ECON 2106 Principles of Microeconomics

NOTE: Students can receive credit for either ECON 2100 or ECON 2101, or for ECON 2105/2106. Students cannot receive credit for ECON 2100 and ECON 2101, or for ECON 2100 and ECON 2105/2106, or for ECON 2101 and ECON 2105/2106.

With permission of the WST coordinators, students may substitute one independent study course or course from another Georgia Tech unit. This may be chosen from special topics courses, seminars, and other courses that focus upon gender and social inequality or social issues of science and technology. Students may register and plan their courses of study for the WST minor by meeting with WST coordinators, Carol Colatrella (LCC) or Mary Frank Fox (PUBP). Students petition for the minor at the time they petition for their major degree. Minors are conferred upon graduation and appear on students' transcripts.

Request to update Course descriptions:

LCC 3204: Poetry and Poetics (Effective date of course 199908 to present)

Current Description of LCC 3204 - Poetry and Poetics (3 Credit Hours)
A study of traditions of poetic practice and poetic theory in English, in conjunction with a weekly workshop session centered on student's own poetry.

Revised Description of LCC 3204 - Poetry and Poetics (3 Credit Hours)
A study of traditions of poetic practice and poetic theory in English through intensive line by line readings of poems from different periods in literary history.

LCC 4204: Poetry and Poetics II (Effective date of course 200405 to present)

Current Description of LCC 4204 – Poetry and Poetics II (3 Credit Hours)
Advanced study of the traditions of poetic theory and practice with a special emphasis on processes of poetic conception and revision.

Revised Description of LCC 4204 – Poetry and Poetics II (3 Credit Hours)
Advanced study of the traditions of poetic theory and practice in conjunction with a weekly workshop session centered on students' own poetry.

During the meeting, discussion about whether a course description can be made to an existing course without requiring a new course number, and whether there is a threshold for how much in a course description can change before a new number *must* be assigned. Also, see item #5 for a similar discussion related to the MATH course.

Further investigation was done after the meeting and it was verified that these LCC courses are not new courses. The Registrar's Office will follow up with LCC on this subject and will bring the issues back to the IUCC for clarification or follow-up action if needed.

Objective: To rewrite the course descriptions for LCC 3204: Poetry and Poetics and 4204: Poetry and Poetics II so they more accurately match the current sequence of poetry courses offered through LCC.

Background: In fall 2010, LCC professor Tom Lux petitioned the LCC UCC to make his special topics in poetry class (LCC 2823) a regular course offering. While the UCC agreed that the course had been offered successfully a number of times and that it should indeed have its own regular number, members of the UCC were concerned that there was no clear difference between the course description on Professor Lux's syllabus for LCC 2823 and the current description of LCC 3204: Poetry and Poetics. Accordingly, the UCC asked him to articulate the difference between those classes and to revise the syllabus accordingly.

As he was doing so, Professor Lux realized two things. First, he realized that we already had a poetry course that nobody had ever taught and that could and should be used for his class, LCC 4204: Poetry and Poetics II. Second, he realized that rather than rewriting the syllabus for LCC 2823 (and for 3204); it would make more sense to simply revise the course descriptions.

This has two advantages: it capitalizes on what Professor Lux is already doing with his classes and the new numbers will more clearly signal to students the logical progression of the courses themselves. (In an ideal world, students would begin their formal study of poetry at Tech with a poetry survey in LCC 3204 and then work on making their own poems in LCC 4204.)

Adjourned,

Reta Pikowsky
Registrar