

Institute Undergraduate Curriculum Committee
Minutes
March 11, 2009

Present: Pikowsky (REG), Tone (HTS), Bottomley (CHEM), Isbell (CoC), Seitzman (AE), Kubanek (BIOL), Chang (MGT), Riley (ECE), Castro (COA), Benkeser (BME), Ferri (ME), Montoya (BIOL), Schatz (PHYS)

Visitors: Howson (REG), Jones (REG), Laros (REG), Senft (REG), Paraska (Provost), Blaylock (ME), Rahnemia (ME), Yen (BIOL), Tovey (ISYE), Llewellyn (CETL), Bruckman (CoC), Harwell (UROP)

Note: 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.

Administrative Matters

Susan Paraska of the Provost's Office did a presentation on changes in the process for program review. She outlined the changes and talked about how this would impact the work of the Program Review Subcommittee. The Chair of the IUCC, Dr. Tone, called for a meeting of the Program Review Subcommittee to discuss the changes and to form a strategy. He also asked that the Provost's Office forward as soon as possible the program review information so that the Subcommittee can determine how to proceed to meet the deadline for getting the reviews completed.

Academic Matters

1. A motion was made to approve a request from the School of Biology for new certificates and to eliminate the existing certificate. The motion was seconded and approved.
 - Biomedical Science (CIP 26.0102)
 - Biomolecular Technology (CIP 26.1201)
 - Computation and Quantitative Biology (CIP 26.1101)
 - Environmental Science (CIP 03.0104)
 - Marine Science (CIP 26.9999)
 - Integrative Biology (CIP 26.0102)

The School of Biology proposed the establishment of 6 new optional Certificates in Biology for undergraduates majoring in Biology or other disciplines. It also proposed removing the current certificate "Biology" which is only available to non-biology majors and is hardly ever utilized. Georgia Tech regulations require that certificates consist of 12 credit-hours of coursework, including at least 9 credits at the 3000+ level. Courses required by name and number for a student's major program of study may not count towards a certificate. Students may not double-count courses towards more than one certificate or minor. Non-Biology majors will be required to include at least 9 credits of BIOL coursework within their certificate. Students should choose 12 credits from the lists below for each of the 6 new certificates:

1) Biomedical Science

APPH/BIOL 3751	Human Anatomy and Physiology
BIOL 4015	Cancer Bio/Tech
BIOL 4105	Macromolecular Modeling
BIOL 4150	Genomics
BIOL 4340	Medical Microbiology
BIOL 4401	Experimental Design and Statistical Methods
BIOL 4464	Developmental Biology
BIOL 4570	Immunology and Immunochemistry
BIOL 4668	Eukaryotic Molecular Genetics
BIOL 4752	Introduction to Neuroscience
BIOL 4802	Special Topics: Current Trends in Biomedical Entrepreneurship
BIOL 4803	Special Topics: Virology
BIOL 4803	Special Topics: Endocrinology
BMED 3100	Systems Physiology
BMED 3110	Quant Engr Physio Lab I
BMED 4400	Neuroengineering
BMED 4500	Cell and Tissue Engineering Lab
BMED 4570	Diagnostic Imaging Physics
BMED/CHEM/ CHBE 4765	Drug design, development and delivery
LCC 2300	Intro Biomedicine & Culture

2) Biomolecular Technology

BIOL 3380	Microbiology
BIOL 3381	Microbiology Lab
BIOL 4105	Macromolecular Modeling
BIOL 4150	Genomics
BIOL 4225	Molecular Evolution
BIOL 4440	Plant Physiology

BIOL 4746	Signaling Molecules
BIOL 4478	Biophysics
BIOL 4608	Prokaryotic Molecular Genetics
BIOL 4668	Eukaryotic Molecular Genetics
BIOL 4802	Special Topics: Microbial Genomics
BIOL 4803	Special Topics: Protein Biology (once approved)
BMED/CHEM/ CHBE 4765	Drug design, development and delivery
CHEM 4511	Biochemistry I
CHEM 4512	Biochemistry II
CHEM 4521	Biophysical Chemistry
CHEM 4803	Special Topics: Macromolecular Structure
CHBE 4760	Biocatalysis

3) Computational & Quantitative Biology

BIOL 2400	Mathematical Models in Biology
BIOL 4105	Macromolecular Modeling
BIOL 4150	Genomics
BIOL 4225	Molecular Evolution
BIOL 4401	Experimental Design and Statistical Methods
BIOL 4422	Theoretical Ecology
BIOL/MATH 4755	Mathematical Biology
BMED 4477	Bio Networks & Genomics
CS 4400	Introduction to Database Systems
CS 4710	Intro to Computing Concepts in Bioinformatics
MATH 3012	Applied Combinatorics
MATH 3215	Probability & Statistics
MATH 4022	Introduction to Graph Theory
CEE/ISYE/MATH 3770	Statistics & Applications

4) Environmental Science

BIOL 2100	Biogeography of New Zealand
BIOL 3100	Ecology and Evolution of Australia
BIOL 3300	Tropical Ecology
BIOL 3380	Introductory Microbiology
BIOL 3381	Introductory Microbiology Lab
BIOL 4101	Sensory Ecology
BIOL 4221	Biological Oceanography
BIOL 4410	Microbial Ecology
BIOL 4417	Marine Ecology
BIOL 4418	Microbial Physiology
BIOL 4422	Theoretical Ecology

BIOL 4440	Plant Physiology
BIOL 4446	Animal Physiology
BIOL 4471	Behavior Biology
BIOL 4620	Aquatic Chemical Ecology
BIOL 4803	Special Topics: Urban Ecology
BIOL 4803	Special Topics: Population & Evolutionary Ecology
CEE 2300	Environmental Engineering Principles
CEE 3340	Environmental Engineering Laboratory
CEE 4300	Environmental Engineering Systems
CEE 4620	Environmental Impact Assessment
CHEM/EAS 4740	Atmospheric Chemistry
EAS 1600	Intro Environmental Science
EAS 1601	Habitable Planet
EAS 2420	Environmental Measures
EAS 2600	Earth Processes
EAS 2602	Earth Through Time
EAS 4110	Resources, Energy & the Environment
EAS 4300	Oceanography
EAS 4350	Paleoclimate & Paleoceanography
EAS 4410	Climate & Global Change
EAS 4602	Biogeochemical Cycles

5) Marine Science

BIOL 4221	Biological Oceanography
BIOL 4410	Microbial Ecology
BIOL 4417	Marine Ecology
BIOL 4446	Animal Physiology
BIOL 4620	Aquatic Chemical Ecology
CEE 3040	Fluid Mechanics
CEE 4225	Coastal Engineering
EAS 3620	Geochemistry
EAS 4300	Oceanography
EAS 4350	Paleoclimatology and Paleoceanography
EAS 4602	Biogeochemical cycles
NS 2323	Navigation

6) Integrative Biology

12 credits chosen from courses represented in four of the other certificates (e.g., 3 credits from each of 4 other certificates = 12 credits total).

For non-Biology majors:

Additional courses that can count towards any of the above certificates are: BIOL 1510/1511, BIOL 1520/1521, BIOL 2335/2337, BIOL 2344/2345, BIOL 3340 (as long as

these courses are not required for their major program of study, and only up to 3 credits of courses at the 1xxx-2xxx level can count). At least 9 credits of BIOL coursework are required for each certificate

2. A motion was made to approve a new course from the School of Biology, the School of Mechanical Engineering, the School of Material Science and Engineering, the School of Polymer, Textile, and Fiber Engineering, and the School of Industrial and Systems Engineering. The motion was seconded and approved.

NEW COURSE (to be cross-listed)

BIOL/ME/MSE/PTFE/ISYE 4740 Biologically Inspired Design 3-0-3

Note: Change to Pre-requisite of BMED 3160 to 3100 (3160 is an Inactive Course)

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

CHANGES TO THE MINOR

- Reduction in total hours required from 18 to 15.
- Removal of specific tracks.
Note: There are currently six tracks within the AE Minor. With this change, there will be a minor in AE, but there will be no tracks within the minor..
- Removal of prerequisite requirements of COE 2001 and AE 2220.

4. A motion was made to approve a request from the School of Mechanical Engineering for new courses, modification of degree requirements, and prerequisite modifications. The motion was seconded and approved.

NEW COURSES

- NRE 3208 Nuclear Reactor Physics I (3-0-3)
- NRE 4208 Nuclear Reactor Physics II (3-0-3)

Note: NRE 3208 replaces NRE 3212. NRE 4208 replaces 4204. Students may not receive credit for both NRE 3208 and 3212. Students may not receive credit for both NRE 4208 and NRE 4204.

DEACTIVATE COURSE

NRE 4204

MODIFICATIONS OF DEGREE REQUIREMENTS:

- Remove required course NRE 3212 “Fundamental of Nuclear and Radiological Engineering”
- Remove required NRE 4204 “Nuclear Reactor Physics”
- Add new required NRE 3208 “Nuclear Reactor Physics I”
- Add new required NRE 4208 “Nuclear Reactor Physics II”

MODIFICATION OF PRE-REQUISITES OF EXISTING COURSES

- NRE 3301 ‘Radiation Physics’ from a co-requisite of PHYS 2213 to pre-requisite of Math 1502 and Physics 2211.
 - NRE 4206 “Radiation Physics Laboratory” from pre-requisites of NRE 4204 and NRE 3112 to pre-requisites of NRE 4208 and NRE 3112.
 - NRE 4232 “Nuclear and Radiological Engineering Design” from pre-requisites of NRE 4204 and NRE 4328 to pre-requisites of NRE 4208 and NRE 4328.
5. A motion was made to approve a request from the School of Literature, Communication, and Culture for new courses and modification of the Undergraduate Research Option program. The motion was seconded and approved.

MODIFICATION OF RESEARCH OPTION REQUIREMENT

- Replacement of the current requirement in the Research Option for the 2-hour LCC 4700 thesis writing course with two 1-hour courses covering the same material to be taken in succession.

NEW COURSES

- LCC 4701: Undergraduate Research Proposal Writing 1-0-1
List as equivalent to LCC 4700
- LCC 4702: Undergraduate Research Thesis Writing 1-0-1
List as equivalent to LCC 4700

Note: LCC 4701 and 4702 are equivalent to LCC 4700 and will replace it. Students may not get credit for both.

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

NEW COURSE

CS 4472 Design of Online Communities 3-0-3

CHANGES TO THREAD PICKS

- Remove CS 4365 Intro to Enterprise Computing from Pick 2 of Introduction to Information Management group
- Remove the following courses from the Enterprise Computing elective group:
 - CS 4560 Verification of Systems
 - CS 4342 Software Generation, Testing & Maintenance
 - MGT 4056 Electronic Commerce
 - MGT 4057 Business Process Analysis & Design
- Create a new Management of Information elective group consisting of:
 - MGT 4056 Electronic Commerce
 - MGT 4057 Business Process Analysis & Design

These revisions do not change the hours or 8-semester plans for the BSCS degree.

There was considerable discussion about whether approval was needed for these changes to Threads and Threads Picks. It was the conclusion of the Committee that these requests in the future will come as information items and will not need to be approved. If the Committee has any concerns, it will then re-evaluate this procedure.

7. A motion was made to approve a request from the Center for the Enhancement of Teaching and Learning for new courses. The motion was seconded and approved.

NEW COURSES

- CETL 2698 Undergraduate Research Assistantship 1-12
- CETL 2699 Undergraduate Research 1-12
- CETL 4698 Undergraduate Research Assistantship 1-12
- CETL 4699 Undergraduate Research 1-12

8. A motion was made to approve a recommendation from the Registrar's Office to include a statement about limitations on petitions for term and course withdrawals to the guidelines that were recently approved and posted to the web site. The motion was seconded and approved.

Note: The Committee suggested some changes in language that will be completed before this information is added to the guidelines document and posted to the web site. The Committee also debated whether this might more appropriately be referred to the Student Regulations Committee as a policy change. After considerable discussion, it was decided that a statement in the posted guidelines would likely serve as a deterrent to these petitions and would provide some notice and frame of

reference for the petitioners, advisors, and registrar's office staff. Therefore, adding the information to the published guidelines, with the suggested changes in wording, would serve the desired purpose.

LIMITATIONS ON PETITIONS FOR LATE TERM WITHDRAWALS

Petitions for late term withdrawals will not be allowed after three terms have passed. In other words, a student who wishes to withdraw from the Fall 2008 term has until the end of the Fall 2009 term in which to file a petition. Petitions that exceed this time limit will be rejected by the Registrar's Office. If a student is not enrolled during the three terms that follow the term from which they wish to withdraw, the petition must be filed within the first term of re-enrollment. There are no exceptions.

LIMITATIONS ON PETITIONS FOR LATE COURSE WITHDRAWALS (SELECTIVE WITHDRAWALS)

Petitions for late course withdrawals (selective withdrawals) will not be allowed after three terms have passed. In other words, a student who wishes to withdraw from a course that was taken in the Fall 2008 term has until the end of the Fall 2009 term in which to file a petition. Petitions that exceed this time limit will be rejected by the Registrar's Office. If a student is not enrolled during the three terms that follow the term in which they are seeking a selective course withdrawal, the petition must be filed within the first term of re-enrollment. There are no exceptions.

9. A motion was made to approve a set of guidelines, pending review of the suggested changes in wording, drafted by the Registrar's Office to address Core requirements, the transition from the quarter system, and related confusion regarding students who have been here for 10 or more years and who are now trying to address credit hour deficiencies in the Math and Lab Science areas. The motion was seconded and approved.

The revised guidelines document will be reviewed by the Committee via email and will be posted in the next set of Minutes.

10. A motion was made to approve an appeal of a student petition for a waiver of the 36-hour rule. The motion was seconded and approved.

Adjourned,

Reta Pikowsky
Registrar