

Institute Undergraduate Curriculum Committee
Minutes
Academic Matters (Full Committee)
Tuesday, February 9, 2016

Present: Mayor (ME), Scott (CEE), Economou (ARCH), Goodisman (BIOL), Hollengreen (ARCH), Mihail (CoC-CS), Millard-Stafford (APPH), Moore (ECE), Parsons (CoB), Potts (Vice Provost), Senf (LMC), Shepler (CHEM-Executive Board Liaison), Singleton (PSYC), Smith (ME), Yaszek (LMC), Zhou (ISYE)

Visitors: Hodges (Registrar), Hammer (BIOL), Green (BIOL), Drummond (CP), Fournier (OIE-IP), Jacobs (COE), Stiftel (CP), Sivakumar (ECE)

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. Approval by the Southern Association of Colleges and Schools, Commission on Colleges may also be required.

Note: All votes are unanimous unless specifically noted otherwise.

Academic Matters

1. A motion was made to *approve* a request from the School of Biology for a new course with a lab science attribute. The motion was seconded and approved.

New Course – Approved

BIOL 1220: Biology of Sex and Death 3-3-4

The Committee approved upon contingency that on Page 2 of the Core Course Proposal Form that #5 and #6 be updated to reflect the accurate number of hours and title.

An updated Core Course Proposal Form was submitted and uploaded to the IUCC site on February 10, 2016.

A motion was made to approve a request from the School of Biology for a pre-requisite modification. This motion was seconded and approved.

Pre-requisite Modification - Approved

BIOL 1521: Honors Organismal Biology

Current: BIOL 1510 minimum grade of B or BIOL 1511 with minimum grade of B, AP 4, or IBBI 4.

Proposed: BIOL 1510 minimum grade D or BIOL 1511 with minimum grade of D

2. A motion was made to *approve* a request from the School of Industrial and Systems Engineering for a degree modification.

Degree Modification – Approved

Bachelor of Science in Industrial Engineering (BSIE) – all concentrations

- Add a restriction on the 9 hours of selective engineering electives for BSIE and formalize the requirements currently in place. Specifically,
 - Restrict 3 hours of engineering elective to ECE 2020 Digital System Design, or ECE 2026 Signal Processing, or ECE 3710 Circuits and ECE 3741 lab.
 - Formalize the existing practice that at least 5 hours engineering elective, including 3 hours from ECE courses above, be from group I (traditional) engineering electives.
 - Formalize the existing requirements that the 9 hours engineering elective must include at least 2 different subjects with minimum of 2 hours in each subject.
 - Delete CHBE 4751 from Group 2 list as the course never existed.
- Add an alternative math sequence to the current sequence with respect to linear algebra and multi variate calculus. There is no change in the total hours required.
 - Current: MATH 1553 Intro to Linear Algebra (2) + MATH 2551 (4) Multivariate Calculus
 - Alternative: MATH 1554 (4) Linear Algebra + MATH 2550 (2) Intro to Multivariate Calculus.

It was noted that no change in the total number of hours would happen as a result of the degree modification. Students who had over 9 hours of Engineering Electives could use the overage in free electives.

See Proposal #4860 for detailed proposed degree requirements.

Dr. Zhou also advised that the ISYE Curriculum Committee wished to remind the IUCC to determine a course of action for minors and shareable courses from a major.

3. A motion was made to *approve* a request from the School of Applied Physiology for a pre-requisite modification. The motion was seconded and approved.

Pre-requisite Modification – Approved

APPH 4600: Muscle Structure & Plasticity

Current: BIOL 1510

Proposed: BIOL 1510, BIOL 1511, BMED 3100, APPH 3755, or **BIOL 3755**

It was noted that BIOL 3755 should be added as an option since it is a cross-listed course with APPH 3755.

4. A motion was made to *approve* a request from the Office of International Education to add new courses to the International Plan. The motion was seconded and approved.

Add New Courses to International Plan – Approved

The International Plan requires that all participants complete a culminating capstone course that integrates the international experiences into the student's major. Each participating academic unit must designate a course (or courses) to be used for the IP Capstone and seek approval from the International Plan Committee. Periodically, participating majors have changes to their curricula which require modifications to their capstone courses. In their September 2015 meeting, the IP Committee reviewed and voted to approve changes to the capstone courses for the following majors. We are asked to inform the UCC when changes occur.

- **ECE:** The content has not changed, but the course number has been updated to reflect recent changes to the ECE senior design course. The new IP capstone course number is ECE 4012-IP (instead of ECE 4007-IP).
 - **Biology:** Previously, all IP Biology students were required to take BIOL 4699-IP. Additional capstone options have been added in order to accommodate students' various pathways to completion. The options now include: BIOL 4699-IP, BIOL 4590, BIOL 4690, and BIOL 4910.
 - **ME:** As more ME students participate in the interdisciplinary senior design course (GT 4823 Interdisciplinary Capstone Design), ME is adding this course as an additional capstone option to ME 4182 Capstone Design. IP students enrolled in GT 4823 will complete the same additional assignment(s) associated with the IP as those in ME 4182.
5. A motion was made to *approve* a request from the College of Engineering for a new course. The motion was seconded and approved.

New Course – Approved

COE 2701: Startup Lab: Introduction to Technology Ventures 3-0-3

The Committee suggested removing the last statement on the syllabus regarding class size and a filtering system for enrollment. Also, it was suggested that there should be indicators of how the course is *not* a business course added to the syllabus to avoid confusion about overlapping content with another program.

An updated syllabus was sent and uploaded to the IUCC site on February 10, 2016.

6. A motion was made to *approve* a request from the School of Public Policy for a certificate modification. The motion was seconded and approved.

Certificate Modification – Approved

Pre-Law Certificate

A motion was made to *approve* a request from the School of Public Policy for a minor modification. The motion was seconded and approved.

The Pre-Law Certificate requires students to take one of four core menu classes. The remaining classes are electives.

One of those electives, entitled "Law and Economics" has been taught as a Special Topic class. We exercised our local authority to apply this class toward the minor/certificate as an elective.

The class has been re-numbered as ECON 4370. We request authorization to apply the newly re-numbered class toward the Pre-Law certificate.

See IUCC site for the full proposal.

Minor Modification – Approved

Law, Science, and Technology minor

The LS&T minor requires students to take one of four core menu classes. The remaining classes are electives.

One of those electives, entitled "Law and Economics" has been taught as a Special Topic class. We exercised our local authority to apply this class toward the minor/certificate as an elective.

The class has been re-numbered as ECON 4370. We request authorization to apply the newly re-numbered class toward the LS&T minor.

7. A motion was made to *approve* a request from the School of City and Regional Planning for new courses. The motion was seconded and approved.

This vote was not unanimous. There were 13 votes to approve and 1 vote to deny.

New Courses – Approved

A motion was made to *approve* a request from the School of City and Regional Planning for a new minor. The motion was seconded and approved.

CP 2233: Sustainable Urban Development 3-0-3

CP 4052: Sustainable Cities Studio 3-0-3

The Committee approved these courses upon contingency that the syllabi for both courses reflect the updated Office of Disabilities Statement and that the equivalency on both NCP's be removed.

The Committee also recommended that an explanation of how participation is tracked should be added to the syllabi so students are aware of their participation grade at certain points during the course.

New Minor – Approved Sustainable Cities

The School of City and Regional Planning proposes to add a new undergraduate minor with the degree inscription “Minor in Sustainable Cities.” The School will administer the minor and provide advising, instruction, and assessment. Interested students will apply through the School of City and Regional Planning.

The major objective of the minor is to build upon the Institute’s “Serve/Learn/Sustain” Quality Enhancement Plan (QEP) with a specific focus on the built environment. The minor will address both the sustainability and community engagement dimensions of the QEP. It will provide students with a deep learning experience that integrates classroom learning and direct real-world community-based project experience in creating a more sustainable built environment.

The minor will consist of five courses and 15 credit hours. It will include (1) six credits of required coursework, (2) one additional 3-credit elective from the School of City and Regional Planning, and (3) two additional 3-credit electives selected from a list of sustainability and community engagement courses offered in City Planning and related academic disciplines.

(A) The two required courses are:

CP 2233: Sustainable Urban Development, an undergraduate version of CP 6233, Sustainable Urban Development with additional material on community engagement

CP 4052: Sustainable Cities Studio, an undergraduate version of CP 6052, Applied Planning Studio

(B) Students must take at least one course from the following list of City Planning undergraduate courses or graduate courses (subject to the normal Georgia Tech requirements for undergraduates taking graduate courses):

CP 4010 – Foundations of Urban Regional Development
CP 4020 – Introduction to Urban and Regional Planning
CP 4105 - Land Conservation
CP 4190 – Introduction to Climate Change Planning
CP 4210 – Environmental Planning and Impact Assessment
CP 4310 - Urban Transportation
CP 4510 - Geographic Information Systems
CP 4610 – Introduction to Real Estate Investment
CP 4620 - Housing and Real Estate Economics
CP 4811, CP 4812, CP 4813, CP 4814, CP 4815 - Special Topics
CP 6223 - Policy Tools for Environmental Management
CP 6442 - Equity, Social Justice, and Economic Development
CP 6612 - Community Development
CP 6630 - Government and Housing Markets
CP 6836 - Urban Ecological Design

(C) Students must take two additional courses drawn from the above list of City Planning courses or selected from the following lists of courses offered in related academic disciplines. These courses are generally suitable for all Georgia Tech undergraduates, but some courses may have pre-requisites or other conditions for enrollment.

Student may take one additional 2000 level course from the following list:

GT 2803 HP – Sustainable Community & Systems or
GT 2803 HP2 – Sustainable Community Principles or
INTA 2040 - Science, Technology & International Affairs or
CEE 2300 - Environmental Engineering Principles (with permit from CEE School)

Students may take one or two courses from the following list:

ARCH 3231 - Environmental Systems I
ARCH 4227 - Architecture & Ecology
ARCH 4151 – History of Urban Form
CEE 4300 - Environmental Engineering Systems (with permit from CEE School)

PUBP 3315 - Environmental Policy & Politics
PUBP 3350 - Energy Policy

PUBP 3600 – Sustainability, Technology, & Policy
PHIL 4176 - Environmental Ethics
MGT 4193 - Servant Leadership, Values and Systems
MGT 4194 - Social Entrepreneurship
INTA 4040 - Environmental Politics
INTA 4050 – International Affairs & Technology Policy

Students must earn a grade of “C” or above in each course (no pass/fail options) for a minimum GPA of 2.0 overall within the minor.

The minor will be administered in coordination with the academic unit offering each student’s major. Electives satisfying the minor requirements that are offered in a student’s major field will count toward the minor if they are within the block or blocks “of elective courses outside of the student’s major field of study in which the same course can be used to satisfy the course requirements in the student’s major degree program and also be used to satisfy the course requirements for a minor,” as specified in the IUCC Undergraduate Minor Guidelines approved on March 24, 2015.

8. A motion was made to *table* a request from the Center for Career Discovery & Development for new courses.

New Courses – Tabled

Note: Any courses that are proposed by a non-academic unit must be approved first through the Provost’s Curriculum Committee. That Committee reviews the request and makes a recommendation to the IUCC. The Chair of the Provost’s Curriculum Committee is Dr. Charles Parsons, Scheller College of Business.

9. Several committee members discussed minor guidelines after the meeting. Questions of how a minor is defined were raised and it was concluded that further discussion was needed.

Adjourned,

Rhett Mayor, Chair, ME