

**Institute Undergraduate Curriculum Committee
Appeals and Academic Matters (Full Committee)
Tuesday, September 4, 2012**

Present: Agrawal (ChBE), Pikowsky (REG), Senf (LCC), Smith (ME), Hollengreen (ARCH), Loss (MATH), Walker (PSYC), Berry (PUBP), Economou (ARCH), Forman (CoB), Goodisman (BIOL), Mayor (ME), Sankar (AE),

Visitors: Laros (REG), Howson (REG), Senft (REG), Appel-Silbaugh (VPSS), Blum (ILE), Kaligotla (ILE), Wynens (PUBP), Merkousko (REG), Cook (MSE), Castro (BC)

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.

Academic Matters

1. A motion was made to acknowledge a request from the School of Materials Science and Engineering for a prerequisite modification. The motion was approved and no concerns were expressed.

PREREQUISITE MODIFICATION: (Acknowledged)

MSE 4761: Industrial Controls & Manufacturing

Remove CS 1371

Add 3710

This prerequisite modification is simply correcting the NCP mistake for MSE 4761, replacing the erroneous CS 1371 and listing for the proper ECE 3710 prerequisite.

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

MINOR MODIFICATION: (Approved)

Leadership Studies

This is to follow up and clarify questions that the IUCC had in reference to the minor modification requested at the July 24, 2012 meeting. Within the request to add courses to be allowed for the minor, there were special topics courses, some special topics courses that have yet to be taught, and courses that did not appear, on the surface, to contain content that would be appropriate for a minor in leadership studies.

At the July 24 meeting, the Committee approved only those courses on the list to be added that already had permanent numbers, or that already had been taught and were in the pipeline for a permanent number.

The purpose of this September 4 review was to gather more information from the College of Business and the School of Public Policy as to why these courses are relevant to the minor, why it is important for Special Topics courses to be allowed, and to determine what the timeframe might be for these courses to have permanent numbers.

Dr. Blum from the Scheller College of Business explained to the Committee how curricular matters are managed, what kind of process is used to approve Special Topics courses, and why Special Topics courses in the College are not used the same way as in the other Colleges at Tech. These are not topical courses in Business and each one has a syllabus and is thoroughly vetted for content. Special Topics are not proposed in Business to cover temporary issues, but to prepare new courses that have been determined to be necessary expansions of the program. When these courses are requested for a permanent number, the content will likely have changed little due to the rigorous review that they got the first time out as a Special Topics.

Dr. Blum also went on to explain the titles of these courses and some internal processes within the College that determine how courses are classified and titled.

Courses approved for the Leadership Studies Minor:

- MGT 4803 Fairness & Leadership: Building Trust** - Pre-requisites: MGT 3101 (Organizational Behavior) or MGT 3150 (Principles of Management)
- MGT 4803 Motivation & Rewards** - Pre-requisites: MGT 3101 (Organizational Behavior) or MGT 3102 (Management of Human Resources)
- MGT 4803 Corporate Governance** (Beginning Spring 2013) - Pre-requisites: MGT 2106 (Legal Aspects of Business)
- MGT 4803 Business Fundamentals for Social Entrepreneurs (Currently available only to participants in the Budapest Study Abroad Program)
- MGT 4803 Management in the Healthcare Sector

Dr. Wynens addressed the issues related to the Public Policy courses and the Psychology course. He explained how these courses were developed, why they are important to the minor, and what the general plan is to have them offered with permanent numbers.

Courses approved for the Leadership Studies Minor:

- PUBP 48X3 Ethical Responsibility in Leadership
- PUBP 4813 Managerial and Leadership Skill Building
- PSY 4XXX Exploring Multicultural Identities

The Registrar's Office will look at other possibilities for handling these kinds of courses so that they can somehow be tracked as courses pending approval versus special topics that are experimental or that have transient content by design.

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

MINOR MODIFICATION: (approved)

Law, Science, and Technology

The LST minor must comprise at least 15 semester hours, of which at least 12 semester hours are upper-division coursework (numbered 3000 or above). No more than 9 semester hours of Special Topics courses may be included in a minor program.

The LST minor requires students to take one of four core menu classes below:

- PUBP 3000 American Constitutional Issues
- PUBP 3016 Judicial Process
- PUBP 3610 Pre-Law Seminar
- PUBP 4609 Legal Practice

The remaining classes are electives. One of those electives has been a class previously offered as MGT 4803 Special Topic: International Business Law. Now that the class has been re-numbered as MGT 3606, we request authorization to apply the newly re-numbered class toward the LS&T minor.

CERTIFICATE MODIFICATION: (approved)

Pre-Law

Students working toward the certificate must take a total of twelve semester hours of applicable credit (nine semester hours at the 3000 level or above).

The Pre-Law Certificate requires students to take one of four core menu classes below:

- PUBP 3000 American Constitutional Issues
- PUBP 3016 Judicial Process
- PUBP 3610 Pre-Law Seminar
- PUBP 4609 Legal Practice

The remaining classes are electives. One of those electives has been a class previously offered as MGT 4803 Special Topic: International Business Law. Now that the class has been re-numbered as MGT 3606, we request authorization to apply the newly re-numbered class toward the LS&T minor.

Electives List for Minor and Certificate:

- CS 4010 Introduction to Computer Law
- CS 4280 Survey of Telecommunications and the Law

ECON 4300/4301 Economics of Information, Transaction Costs and Contracts
ECON 4320/4321 Economics of Technology, Innovation, and Entrepreneurship
HTS 3002 History of American Business
HTS 3006 United States Labor History
HTS 3085 Law, Technology, and Politics
INTA 3031 Human Rights in a Technological World
INTA 3301* International Political Economy
INTA 4060 International Law
MGT 2106** Legal, Social, Ethical Aspects of Business
MGT 3102** Managing Human Resources within a Regulatory Environment
MGT 3606 International Business Law
MGT 4010 Business Taxation
PST 3113 Logic and Critical Thinking
PUBP 3000 Constitutional Issues (if not counted as a core course)
PUBP 3016 Judicial Process (if not counted as a core course)
PUBP 3610 Pre-Law Seminar (if not counted as a core course)
PUBP 4111: Internet and Public Policy
PUBP 4226 Business and Government
PUBP 4314 Environmental Policy and Regulation
PUBP 4440: Science, Technology, and Regulation
PUBP 4512 Politics of Telecommunications Policy
PUBP 4609 Legal Practice (if not counted as a core course)
PUBP 4652 OLA Legal Internship
PUBP 6330 Environmental Law

Special Topics elective courses (number designations may change)

CS 480# Special Topics: Internet Law
INTA 480# Special Topics: International Law
INTA 480# Special Topics: International Human Rights
INTA 480# Special Topics: National Security Law
INTA 480# Special Topics: The Laws of War
ME 480# Special Topics: Engineering Law and Ethics
~~MGT 480# Special Topics: International Business Law~~
MGT 480# Special Topics: Legal Aspects of Real Estate
MGT 480# Special Topics: Technology Law and Ethics
PUBP 480# Special Topics: Biomedical Law, Policy, & Ethics
PUBP 480# Special Topics: Biotechnology Law, Policy & Ethics
PUBP 480# Special Topics: Biotechnology Law & Policy
PUBP 480# Special Topics: Current Controversies
PUBP 480# Special Topics: Environmental Law
PUBP 480# Special Topics: Internet Law
PUBP 480# Special Topics: Law and Science
PUBP 480# Special Topics: Legal Internship
PUBP 480# Special Topics: Mock Trial

PUBP 480# Special Topics: Science, Philosophy, and the Law
PUBP 480# Special Topics: Survey of Telecommunications and the Law
PUBP 480# Special Topics: Technology Law, Policy & Management
PUBP 480# Special Topics: Transactional Law
PUBP 480# Special Topics: Foundations of Leadership (if taken before Summer 2010)
PUBP 48## Special Topics: Advanced Intellectual Property Law (one credit)
PUBP 48## Special Topics: Legal Research and Writing (one credit)

4. A motion was made to approve a request from the School of Building Construction for a prerequisite modification, a new course, a course deactivation, and a degree modification. The motion was approved.

PREREQUISITE MODIFICATION: (Acknowledged)

BC 4730: Best Practices in Multi-Family Property

This course has currently no prerequisites. We are requesting the prerequisite to be BC 4720 Introduction to Residential Property Management & Building Construction.

This prerequisite will ensure that students take BC 4720, which is a general survey of residential property management and construction practices, prior to taking BC 4730, which focuses on the best practices. Presently, students can take both at the same time, or even BC 4730 before BC 4720. Since these students in BC 4730 do not have the appropriate background, the instructor has to cover the material they were supposed to have learned in BC 4720.

NEW COURSE: (approved)

BC 4672: MEP Systems 3-0-3

DEACTIVATE COURSE: (approved)

BC 4670: Construction Industry Issues and Initiatives

DEGREE MODIFICATION: (approved)

Bachelor of Science in Building Construction

The reason for this change is that the course BC 4670 has been carrying the MEP (mechanical, electrical and plumbing) content since 2006, when BC's accrediting body (ACCE) expressly requested to have this content included in BC's undergraduate curriculum. The course title was not changed to accurately reflect the content. On the last ACCE visit in October 2011 this issue was raised again.

BC 4670 Construction Industry Issues has been replaced with BC 4672 MEP Systems and the BSBC curriculum needs to reflect the replacement of this new course for the previous version.

5. A motion was made to approve a request from the School of Biology for a prerequisite modification and a minor modification. The motion was approved.

PREREQUISITE MODIFICATIONS: (Acknowledged)

ALL – Minimum grade of D; Undergraduate Semester Level

BIOL 3450: Cell and Molecular Biology

old: (Biol 1510 or Biol 1511) and Chem 2311

new: (Biol 1510 or Biol 1511) and (Chem 2311 or Chem 1315)

BIOL 3451: Cell and Molecular Biology Lab

old: (Biol 1510 or Biol 1511) and Chem 2311

new: (Biol 1510 or Biol 1511) and (Chem 2311 or Chem 1315)

BIOL 4015: Cancer Biology and Biotechnology

old: Biol 2334 or Biol 2354 and Biol 3340

new: Biol 1510 or Biol 1511 or Biol 1520 or Biol 1521 or Chem 1310 or Chem 1211 or Chem 1212 or Phys 2211 or Phys 2212 or EAS 1600 or EAS 1601 or EAS 2600

BIOL 4418: Microbial Physiology

old: Biol 3380 and Biol 3340

new: Biol 3380 and Biol 3450

BIOL 4446: General Animal Physiology I

old: Biol 3340

new: Biol 3450

BIOL 4464: Developmental Biology

old: (Biol 2344 or Biol 2354) and Biol 3340

new: (Biol 2344 or Biol 2354) and Biol 3450

BIOL 4478: Biophysics

old: Phys 2211 and (Biol 2344 or Biol 2354 or Biol 3340)

new: Phys 2211 and (Biol 2344 or Biol 2354 or Biol 3450)

BIOL 4570: Immunology and Immunochemistry

old: Biol 3340 and (Biol 2344 or Biol 2354)

new: Biol 3450 and (Biol 2344 or Biol 2354)

BIOL 4590: Research Project Lab

old: Biol 1510

new: Biol 1510 or Biol 1511

BIOL 4696: Biology Undergraduate Teaching Assistantship

old: CETL 2000 w/concurrency

new: CETL 2000 w/concurrency and Biol 4697

BIOL 4752: Introductory Neuroscience

old: Biol 3340 or BMed 3160

new: Biol 3450 or BMed 3160

MINOR MODIFICATION: (approved)

Energy Systems

The School of Biology is requesting to become a partner in the existing campus-wide Energy Systems Minor

Overview

The Energy Systems Minor provides students a **15-hour multidisciplinary educational opportunity to study energy systems**. Requirements include courses which provide depth in an area relevant to energy that is within the scope of the student's chosen program. Depth course options available to students may vary depending on the program. The minor also includes requirements for courses which cut across disciplines. These courses are intended to add breadth of knowledge in areas outside the student's major but important to energy systems. A terminal "capstone" or project course provides an opportunity for students from multiple disciplines to work together in multidisciplinary teams on a significant project in the energy area.

The minor is open to all Georgia Tech undergraduate students whose majors have approved the minor; currently PUBP, ECON, EAS, **BIOL**, CHEM, ME, AE and ECE. The breadth courses and the **3-credit capstone project course**, courses taken by all students completing the minor, require one or more pre-requisites; specifically, basic economics, mathematics and lab science courses.

Prerequisite Courses

The prerequisites needed for one or more of the courses required for the minor (breadth courses and the capstone project course) are:

- a. Mathematics through Calculus III (MATH 1501, 1502, and 2401)
- b. Physics (PHYS 2211 and 2212)
- c. Chemistry (CHEM 1310 or CHEM 1211)
- d. Economics (ECON 2100 or 2101 or 2105 and 2106)

Note: ECON 2105-6 are required for ECON majors. For other majors, one ECON course is sufficient. Students are strongly encouraged to complete the prerequisite courses first.

Breadth Courses

The minor requires 6 hours of breadth courses (two courses). Students should strive to complete the necessary prerequisites and the depth courses prior to enrolling in the breadth courses. However, depth courses may be taken concurrently with the courses taken to meet the breadth requirement. All students pursuing the minor choose either a) or d) and either b)

or c) from the list below. Their choices depend on their majors (see notes below). While restrictions apply as to which courses can be used by various majors to fulfill the minor requirements (see Notes i-iv), breadth courses may, with permission of the student's major, be taken for credit outside the minor.

- a) ME 4803 Thermal Systems Engineering
- b) ECON 3300 Economics of Energy Systems
- c) PUBP 3350 Energy Policy
- d) CHEM 3400 Introduction to Alternative Energy

Depth Courses

The minor requires **6 hours of depth courses related to energy systems**. A list of acceptable courses which meet the depth requirement is provided by each major approving the minor. Depth courses may ordinarily serve as technical or free electives in the student's program of study. For multidisciplinary minors, up to six hours of courses in the student's major may count toward meeting the minor requirements.

Depth Courses for Biology Majors:

BIOL 4221 Biological Oceanography
BIOL 4410 Microbial Ecology
BIOL 4418 Microbial Physiology
BIOL 4440 Plant Physiology
CHEM 3511 Survey of Biochemistry
CHEM 4511 Biochemistry I
CHEM 4512 Biochemistry II
EAS 4410 Climate and Global Change
EAS 3110 Energy, the Environment, and Society

Capstone Course

Ordinarily, students must complete all minor requirements before they can register for the Project in Energy Systems course (COE/COS/IAC 4xxx, 3 hours, number and designator TBD). Some flexibility in the pre-requisite chain may be allowed during the first two years of the minor.

Since courses required by name and number cannot be used in a minor, the capstone course in the minor cannot serve as a replacement for the current capstone courses which exist in all engineering programs and in some other programs. This course will have a TBD "cross cutting" designator and be team taught by faculty appropriate to the projects.

Administration

Dr. Monica Halka, PhD, (monica.halka@gatech.edu) will serve as the point person for the advisors in the various academic units. It is these advisors who will track interest among students in their units and who will also do the bulk of the student advising. Dr. Halka will help coordinate the unit advisors as needed.

Petitions

1. A motion was made to approve a petition to register late in three classes. The motion was seconded and approved.

Adjourned,

Reta Pikowsky
Registrar