

Institute Undergraduate Curriculum Committee
Academic Matters and Appeals (Full Committee)
Revised Minutes
Tuesday, February 10, 2015

Present: Mayor (ME), Pikowsky (Registrar), Hollengreen (ARCH), Goodisman (BIOL), Mihail (CoC-CS), Smith (ME), Potts (VP-UE), Sankar (AE), Zhou (ISyE), Berry (PUBP), Parsons (CoB), Economou (ARCH), Scott (CEE), Yaszek (LMC), Loss (MATH), MacIntyre (CoC-IC), Senf (LMC)

Visitors: Laros (Registrar), Hodges (Registrar), Benkeser (BMED), Catrambone (PSYC), D'Unger (HTS), Botchwey (BMED), Laband (ECON), Pedicino (INTA), Kohl (ChBE), Swire (CoB), Clarke (CoB), Niculescu (CoB), Mastrangelo (CoB), Smith (CoB), Realf (ChBE)

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.

Note: All votes are unanimous unless specifically noted otherwise.

Academic Matters

1. A motion was made to *deny* a request from the School of Psychology for a degree modification. The motion was seconded and approved.

The vote was not unanimous. There were 7 votes to approve, seven votes to deny, and 1 vote to abstain. The Chair casting vote to deny broke the tie.

Degree Modification – Denied
Bachelor of Science in Psychology

Current Major Curriculum

Georgia Tech undergraduate students complete 122 hours for their degree. PSYC majors take 48 hours of PSYC requirements, 46 hours of required GT courses outside of PSYC, which leaves them with 28 hours of Free Electives.

PSYC undergrads are required to take 48 hours of psychology courses, of which 22 are Upper Division:

- Nine required core courses
- A 4 hour capstone course (Applied Exp Psych with Lab, or Senior Thesis II)
- 4 courses of PSYC Electives selected from all the courses we offer that are not listed above and with the exception of a few that can be taken only as a Free Elective.

Proposed Curriculum Changes:

- 3 core courses - General Psychology, Research Methods, and Statistics are required.
- Distribution requirement is fulfilled by taking at least two courses from each of two groups.

| REQUIREMENT | REQ HRS | COURSE(S) | NOTES |
|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------|
| Wellness | 2 | APPH 1040 or APPH 1050 | |
| Core A - Essential Skills | 3 | ENGL 1101 | |
| | 3 | ENGL 1102 | |
| | 4 | MATH 1501 | |
| Core B - Institutional Options | 3 | CS 1301 or CS 1315 or CS 1371 | |
| Core C - Humanities | 6 | Any HUM | |
| Core D - Science, Math, & Technology | 8 | CHEM or PHYS | a |
| | 4 | MATH 1502 | |
| Core E - Social Sciences | 3 | HIST 2111 or HIST 2112 or INTA 1200 or POL 1101 or PUBP 3000 | |
| | 3 | PSYC 1101 | c |
| | 4 | PSYC 2015 | c |
| | 2 | Any SS | |
| Core F - Courses Related to Major | 4 | BIOL 1510 or BIOL 1511 | |
| | 4 | BIOL 1520 or BIOL 1521 | |
| | 3 | PSYC 2210 | e |
| | 3 | PSYC 2103 | e |
| | 4 | PSYC 2020 | c |
| | 6 | PSYC 2103 or PSYC 2210 or PSYC 2230 or PSYC 2240 | |
| Major Requirements | 4 | PSYC 3011 | e |
| | 3 | PSYC 3020 | e |
| | 4 | PSYC 3031 | e |
| | 4 | PSYC 3041 | e |
| | 8 | PSYC 3011 or PSYC 3020 or PSYC 3041 | b, c, e |
| | 4 | PSYC 4031 or PSYC 4601 | c |
| PSYC Electives | 3 | PSYC 4000 level Electives | b, c, d |
| | 9 | PSYC Electives | b, c, d, e |
| | 9 | PSYC 2103 or PSYC 2210 or PSYC 2230 or PSYC 2240 or PSYC 3011 or PSYC 3020 or PSYC 3041 or PSYC 3XXX or PSYC 2220 or PSYC 2270 or PSYC 2280 or PSYC 2400 or PSYC 2699 or PSYC 2760 or PSYC 2803 or PSYC 4010 or PSYC 4050 or PSYC 4090 or PSYC 4100 or PSYC 4200 or PSYC 4260 or PSYC 4270 or PSYC 4600 or PSYC 4699 | b, c, d, e |
| Free Electives | 38 | Free Electives | |
| TOTAL: | 122 | | |
| <i>Pass-fail allowed only for Free Electives.</i> | | | |
| At least 39 hours of upper division coursework required for the degree. | | | |
| LEGEND | | | |
| a = CHEM 1211K or CHEM 1212K or CHEM 1310 or CHEM 1311/1312 or PHYS 2211 or PHYS 2212 or PHYS 2231 or PHYS 2232. | | | |
| b = At least 21 hours of 3000/4000 level psychology courses must be taken summed across major requirements and PSYC electives. PSYC 4699 does not count towards the number of 4000 level | | | |
| c = C-minimum required. | | | |
| d = Maximum of three credit hours of PSYC 2699 or PSYC 4699 (combined) can be counted towards PSYC electives. | | | |
| e = If PSYC 3020 (3 credit hour course) is taken for major field requirement choice, then 10 hours of PSYC electives are required. | | | |

There was a lengthy discussion of this proposal. It was noted that this proposal would be compliant with USG standards even though it includes 38 hours of free electives. There was concern expressed about the fact that students could complete this program with only 3 hours at the 4000-level. It was noted that someone viewing the transcript might question the depth of the program if only 3 hours at the 4000-level were completed. The 3 hours at the 4000-level consist solely of the capstone course.

There was discussion as to whether the School should consider changing some of the 3000-level numbers to 4000-level numbers. The School apparently looks at both levels as “upper division” and as equally rigorous. It could be that nothing would materially change if some courses were reassigned to the 4000-level.

Some Committee members were curious about the 38 hours of free electives and how students tend to fill them. Some take more PSYC classes, some do minors, and others take whatever courses are of interest to them. Students in the program are advised to use the 38 hours of free electives wisely and to think about minors and certificates, or other coherent series of courses.

There was a suggestion that the School might considered a threaded curriculum or concentrations, but as it turns out this would be very difficult to do given the array of courses available. Therefore, it is unlikely that this course of action would be realistic any time in the near future if at all.

The School will consider all of these issues and bring the proposal back for further review.

2. A motion was made to *approve* a request from the School of History, Technology, and Society for a degree modification. The motion was seconded and approved.

Degree Modification – Approved

Bachelor of Science in History, Technology, and Society

First, HTS requests **approval to modify the HTS degree to shift 3 credit hours from “Free Electives” to “HTS Electives.”** This will bring the required HTS coursework for the major (HTS Core courses and HTS electives) to 56 credit hours, which historically has been the case. This change will reduce the Free Electives from 21 to 18 hours and will increase the HTS Electives for the major from 21 to 24 hours.

Second, HTS requests **approval to modify the HTS degree to reflect new courses added to the HTS curriculum that will help fulfill major requirements**, specifically the “Non-U.S.” and the “Science, Technology, and Medicine” requirements.

- Add to Non-U.S. Requirement:
HTS 2040: History of Islamic Societies to the 1500s
HTS 2041: History of the Modern Middle East

HTS 3048: Modern Russian History
 HTS 3055: Globalization in the Modern Era

- Add to Science, Technology, and Medicine Requirement:
 HTS 1081: Engineering in History
 HTS 2080: Introduction to the History of Disease and Medicine
 HTS 3080: History of Rocketry
 HTS 3081: Technology and Environment
 HTS 3088: Race, Medicine, and Science
 HTS 3089: Science, Technology and Sports

| REQUIREMENT | REQ HRS | COURSE(S) | NOTES |
|--------------------------------------|---------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------|
| Wellness | 2 | HPS 1040 or APPH 1040 or APPH 1050 | |
| Core A - Essential Skills | 3 | ENGL 1101 | |
| | 3 | ENGL 1102 | |
| | 4 | MATH 1501 or MATH 1712 | |
| Core B - Institutional Options | 3 | CS 1301 or CS 1315 | |
| Core C - Humanities | 6 | Modern Language | |
| Core D - Science, Math, & Technology | 4 | Lab Science | |
| | 4 | Lab Science | |
| | 4 | MATH 1502 or MATH 1711 | |
| Core E - Social Sciences | 3 | HIST 2111 or HIST 2112 or INTA 1200 or POL 1101 or PUBP 3000 | |
| | 9 | HTS Electives | b |
| Core F - Courses Related to Major | 3 | ECON 2100 or ECON 2101 or ECON 2105 or ECON 2106 | c |
| | 3 | HTS 1031 or HTS 2036 or HTS 2037 or HTS 2040 or HTS 2041 or HTS 2061 or HTS 2062 or HTS 3028 or HTS 3029 or HTS 3030 or HTS 3031 or HTS 3032 or HTS 3033 or HTS 3035 or HTS 3036 or HTS 3038 or HTS 3039 or HTS 3041 or HTS 3043 or HTS 3045 or HTS 3046 or HTS 3048 or HTS 3051 or HTS 3055 or HTS 3061 or HTS 3062 or HTS 3063 or HTS 3064 or HTS 3065 or HTS 3069 | c |
| | 3 | HTS 2101 | c |

| | | | |
|--------------------|------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------|
| | 3 | HIST 2111 or HIST 2112 | a, c |
| | 3 | SOC 1101 | c |
| Major Requirements | 9 | HTS 1081 or HTS 2080 or HTS 2081 or HTS 2082 or HTS 2084 or HTS 2100 or HTS 3001 or HTS 3007 or HTS 3020 or HTS 3021 or HTS 3046 or HTS 3080 or HTS 3081 or HTS 3082 or HTS 3083 or HTS 3084 or HTS 3085 or HTS 3086 or HTS 3087 or HTS 3088 or HTS 3089 | c |
| | 8 | HTS 4001 or HTS 4011 or HTS 4031 or HTS 4061 or HTS 4081 or HTS 4086 or HTS 4091 | c |
| Non-Major Cluster | 12 15 | HTS Electives | |
| Free Electives | 21 18 | Free Electives | d |
| TOTAL: | 122 | | |

Pass/fail: Students can do pass/fail for HTS electives, non-major cluster, and free electives. All courses in the HTS core must be taken for a letter grade and the student must earn a C or better.

Notes

a = This must be a different class from that used to satisfy the Legislative Requirement.

b = Any HTS course that carries a Social Science attribute.

c = C-minimum required.

d = 12 credits required in either the same prefix or part of a coherent theme. Please consult with advisor on course selection.

- A motion was made to *approve* a request from the College of Business for new courses. The motion was seconded and approved.

New Courses – Approved

MGT 4450: Project Management 3-0-3

Note: 13 votes to approve, 1 vote to deny, and 1 vote to abstain.

MGT 4725: Information Security Strategies and Policy 3-0-3

Note: 13 votes to approve, 1 vote to abstain. The syllabus will be updated to explain the difference between what kinds of work the undergraduate students will do compared to the graduate students.

MGT 4726: Privacy, Technology, Policy, and Law 3-0-3

4. A motion was made to *approve* a request from the College of Computing for new courses. The motion was seconded and approved.

New Courses – Approved

CS 4725: Information Security Strategies and Policy 3-0-3

Note: See notes on MGT 4725 above.

CS 4726: Privacy, Technology, Policy, and Law 3-0-3

5. A motion was made to *acknowledge* a request the College of Computing for a prerequisite modification. The motion was acknowledged without concern.

Prerequisite Modification – Acknowledged without concern

CS 4460: Intro Info Visualization

Change prereq from CS 1331 to CS 1332 with a grade of C or higher.

Note: 13 votes to approve, 1 vote to abstain.

Prerequisite Modification – Acknowledged without concern

CS 4650: Natural Language

Change prereq from CS 1331 to CS 3510 with a grade of C or higher.

6. A motion was made to *approve* a request from the School of International Affairs for degree modifications. The motion was seconded and approved.

Degree Modification – Approved

Bachelor of Science in International Affairs

The Sam Nunn School of International Affairs requests approval to modify and expand the list of courses that may be taken to fulfill the HTS requirement under Core Area E. This HTS requirement calls for a study of non-US history, to be fulfilled through a social science course with the HTS prefix. In recent years the School of History, Technology and Society has updated its course catalog. This request is to add the following courses to the list of applicable courses for this HTS requirement:

ADD to List of Electives:

HTS 2040: History of Islamic Societies

HTS 3031: European Labor History

HTS 3032: European Intellectual History

HTS 3046: Science, Politics and Culture in Nazi Germany

HTS 3051: Women and Gender in the Middle East

HTS 3065: History of Global Societies

HTS 3067: Revolutionary Movements

Degree Modification – Approved

Bachelor of Science in Economics and International Affairs

The Sam Nunn School of International Affairs requests approval to modify and expand the list of courses that may be taken to fulfill the HTS requirement under Core Area E. This HTS requirement calls for a study of non-US history, to be fulfilled through a social science course with the HTS prefix. In recent years the School of History, Technology and Society has updated its course catalog. This request is to add the following courses to the list of applicable courses for this HTS requirement:

ADD to List of Electives:

HTS 2040: History of Islamic Societies

HTS 3031: European Labor History

HTS 3032: European Intellectual History

HTS 3046: Science, Politics and Culture in Nazi Germany

HTS 3051: Women and Gender in the Middle East

HTS 3065: History of Global Societies

HTS 3067: Revolutionary Movements

The School of Economics requests approval to add ECON 2250 as a required course for the EIA majors. This course will be the first in a sequence of 2 courses (the other two being ECON 3161 Econometrics) for our EIA majors. ECON 2250, “Statistics for Economics” is tailored to provide majors with the tools and concepts that economists use. It was approved and added to the Catalog for the 2014-15 academic year. This class will replace MGT 2250, which will be deleted from the EIA curriculum.

Core F: Required class

Delete MGT 2250

Add ECON 2250

Degree Modification – Approved

Bachelor of Science in International Affairs and Modern Language

The Sam Nunn School of International Affairs requests approval to modify and expand the list of courses that may be taken to fulfill the HTS requirement under Core Area E. This HTS requirement calls for a study of non-US history, to be fulfilled through a social science course with the HTS prefix. In recent years the School of History, Technology and Society has updated its course catalog. This request is to add the following courses to the list of applicable courses for this HTS requirement:

ADD to List of Electives:

HTS 2040: History of Islamic Societies

HTS 3031: European Labor History

HTS 3032: European Intellectual History

HTS 3046: Science, Politics and Culture in Nazi Germany

HTS 3051: Women and Gender in the Middle East

HTS 3065: History of Global Societies

HTS 3067: Revolutionary Movements

Certificate Modification – Tabled

Certificate in European Affairs

This proposal will be moved to next agenda.

7. A motion was made to *approve* a request from the School of Chemical and Biomolecular Engineering for a new course. The motion was seconded and approved.

New Course – Approved

CHBE 4050: Science and Engineering of Microelectronic Fabrication 3-0-3

Note: The syllabus will be revised to reflect clearly delineated learning outcomes.

8. A motion was made to *table* a request from the School of Chemical and Biomolecular Engineering for a minor modification. The motion was seconded and approved.

Minor Modification (*add ChBE as a Participating School*) – Tabled

Minor in Energy Systems

The School of Chemical and Biomolecular Engineering wishes to be a participating school in the Energy Systems minor. Currently students in chemical engineering cannot participate in the Energy Systems Minor. We have a number of students that wish to participate in the minor.

Prerequisite Courses

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

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

Students ordinarily pursue the minor upon completion of the needed prerequisites. However, the depth course requirements (see below) may be taken as soon as students have met the relevant prerequisites.

Depth Courses

The minor requires **six 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 be taken in the student's major to ensure the depth in that major needed to peruse a multidisciplinary minor. All acceptable depth courses must be consistent with the goals of the minor. Examples of acceptable courses include engineering courses covering a specific energy technology like solar or relevant engineering science.

Menus of Depth Courses by Program

The Depth Courses below may have additional prerequisites; please check <http://www.catalog.gatech.edu/courses/index.php> to view the current prerequisites.

Chemical & Biomolecular Engineering

CHBE 4020 Chemical Engineering in Nanoscale Systems

CHBE 4310 Bioprocess Engineering

CHBE 4760 Biocatalysis

CHBE 4803 Electrochemical Energy Storage & Conversion

CHBE 6130 Electrochemical Engineering

Breadth Courses

The minor requires **six 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.

- ECON 3300 Economics of International Energy Markets
- PUBP 3350 Energy Policy
- CHEM 3700 The Science of Alternative Energy

Capstone Course

GT 4813 Project in Energy Systems

Ordinarily, students must complete all minor requirements before they can register for the Project in Energy Systems course.

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

Deactivate Course – Approved

ISYE 4790: Cognitive Science

ISyE 4790 was associated with the minor in cognitive science. The minor and the associated courses were not offered since 2005. The faculty in ISyE decided to deactivate this course. There is no other units involved in this course now.

Degree Modification – Approved

Bachelor of Science in Industrial Engineering

- Remove CEE 3000 Civil Engineering Systems from the approved Engineering electives.
[AE 2020](#) or [AE 2220](#) or [AE 3310](#) or [CHBE 2100](#) or [CHBE 2110](#) or [COE 2001](#) or [COE 3001](#) or ~~[CEE 3000](#)~~ or [CEE 3010](#) or [CEE 4100](#) or [CEE 4300](#) or [CEE 4600](#) or [ECE 2025](#) or [ECE 2030](#) or [ECE 2040](#) or [ECE 3035](#) or [ECE 3076](#) or [ECE 3710](#) or [ECE 3741](#) or [ECE 4823](#) or [ME 2202](#) or [ME 3057](#) or [ME 3720](#) or [ME 4763](#) or [ME 4764](#) or [MSE 2001](#) or [MSE 2020](#) or [MSE 3012](#) or [MSE 3025](#) or [NRE 4803](#) or [PTFE 2200](#) or [PTFE 3200](#) or [PTFE 3220](#) or [PTFE 3720](#)

- Remove MGT 3150 from business electives.
[ACCT 2101](#) or [MGT 3000](#) or ~~MGT 3150~~

CEE 3000 covers communications, engineering economy and basics of civil systems. ISyE now covers communications in senior design as well as in a technical communications class. Engineering economy is a required course for BSIE. Therefore, there is insufficient of new materials in the course for BSIE students.

BSIE curriculum has 3 credit management elective. The current curriculum allows the students to select from ACCT 2101 Accounting I, MGT 3000 Finance and Management Accounting and MGT 3150 Principles of Management. Accounting is extremely important for ISyE students. ISyE would require every graduate to have at least one accounting course. This can be achieved by removing MGT 3150. ISyE has 11 hours of free electives. Those interested 3150 can use the free electives.

See proposal 4674 for details for each BSIE concentration.

10. A motion was made to *acknowledge* a request from the School of Industrial and Systems Engineering for a prerequisite modification. The motion was acknowledged without concern.

Prerequisite Modifications – Acknowledged without concern

ISYE 4301: Supply Chain Economics

ISyE 4301 Supply Chain Economics was approved by IUCC in 2009 with proposal 358. There was an error in the NCP form. The prerequisites in the syllabus submitted in the proposal were ISyE 3232 Stochastic Mfg&Serv Systems and ISyE 3133 Engineering Optimization. However, the NCP listed the prerequisites as ECON 2100, ISyE 2028, ISyE 3133. We propose to change it to the correct listing of ISyE 3232 and ISyE 3133.

11. A motion was made to *acknowledge* a request from the Department of Biomedical Engineering for a prerequisite modification. The motion was acknowledged without concern.

Prerequisite Modifications – Acknowledged without concern

BMED 2210: Conservation Prin in BME

BMED 3610: Quant Engr Physio Lab II

BMED 4602: Capstone Design

BMED 4757: Biofluid Mechanics

BMED 4784: Engr Electrophysiology

The following change is needed to better align the prerequisites with the current topical coverage of the course.

BMED 2210: Undergraduate Semester level ~~BMED 1300~~ **MATH 1501**
Minimum Grade of C and (Undergraduate Semester level CHEM 1211

Minimum Grade of C or Undergraduate Semester level CHEM 1310
Minimum Grade of C) ~~and Undergraduate Semester level PHYS
2211 Minimum Grade of C~~

Note: There were 13 votes to approve and 1 vote to abstain.

The following changes are needed to reflect the new numbers for the current courses BMED 2300, BMED 3300, BMED 3510, as well as the addition of ECE 3710 as a required course.

BMED 3610: Undergraduate ~~Quarter~~ **Semester** level BMED ~~2300~~
2310 Minimum Grade of D and Undergraduate ~~Quarter~~ **Semester** level
BMED ~~3300~~ **3310** Minimum Grade of D and Undergraduate ~~Quarter~~
Semester level BMED 3110 Minimum Grade of D and Undergraduate
~~Quarter~~ **Semester** level BMED 3600 Minimum Grade of D
(w/concurrency)

BMED 4602: Undergraduate Semester level BMED ~~2300~~ **2310** Minimum
Grade of D and Undergraduate Semester level BMED 3610 Minimum
Grade of D **(w/concurrency)**

BMED 4757: Undergraduate Semester level BMED ~~3300~~ **3310** Minimum
Grade of D

BMED 4784: Undergraduate Semester level ECE 3040 Minimum Grade of
D or Undergraduate Semester level ~~BMED-3510~~ **ECE 3710** Minimum
Grade of D

12. A motion was made to *approve* a request from the Department of Biomedical Engineering for new courses and a degree modification. The motion was seconded and approved.

New Courses – Approved

| | |
|---------------------------------------------------|-------|
| BMED 2250: Problems in Biomedical Engineering | 1-6-3 |
| BMED 2310: Intro to Biomedical Engineering Design | 1-6-3 |
| BMED 3310: Biotransport | 2-3-3 |
| BMED 3520: Biomedical Systems and Modeling | 2-3-3 |

Note: The School will come back at a later date to request deactivation of the former versions of these courses. The NCPs on the courses were revised to reflect a 2-3-3 pattern for three credit total with a recitation.

Degree Modification – Approved

Bachelor of Science in Biomedical Engineering

- The topical content of two 4-credit-hour courses, BMED 3300 and 3510, have been reduced. These two courses will be replaced by two new 3-credit-hour

versions, BMED 3310 and BMED 3520, with the same titles. This change is necessary to free up credit hours to add new required courses. The prerequisites for the new versions have been modified slightly to better reflect the topical content of the courses.

- ECE 3710 and 3741 will be added as required courses. These additions will address needs for the students to have better understanding of circuits and instrumentation.
- BMED 1300 “Problems in BME I” will be renamed/numbered to BMED 2250 “Problems in Biomedical Engineering” with BMED 2210 as a prerequisite. A significant percentage of freshmen who take BMED 1300 will change majors. This change will significantly reduce the number of students who take this course and allow BME to better manage its teaching resources.
- Prerequisites for BMED 2210 will be changed to remove PHYS 2211 as a prerequisite (i.e. leaving MATH 1501 AND CHEM 1211K as the only prerequisites). This better reflects the topical content of the course.
- BMED 2300 “Problems in BME II” will be renamed/renumbered to BMED 2310 “Intro to BME Design” with prerequisites of BMED 2210 AND BMED 2250 (both with a minimum grade of C). The content of the course will remain the same. The new name better reflects the topical content of the course.
- BMED 1000 will be eliminated as a required course. The major and career advisement formerly provided by this course will be replaced by a series of workshops and seminars, both live and video recorded, conducted by the staff of the BME Academic Office. This will provide greater flexibility and access to advisement resources without charging them tuition for it.

| REQUIREMENT | REQ HRS | COURSE(S) | NOTES |
|--------------------------------------|---------|----------------------------------------------------------------------------------------------------------------------------------------------|-------|
| Wellness | 2 | APPH 1040 or APPH 1050 | |
| Core A - Essential Skills | 3 | ENGL 1101 | |
| | 3 | ENGL 1102 | |
| | 4 | MATH 1501 | a, c |
| Core B - Institutional Options | 3 | CS 1371 | |
| Core C - Humanities | 6 | Any HUM | b |
| Core D - Science, Math, & Technology | 4 | PHYS 2211 | c, d |
| | 4 | PHYS 2212 | e |
| | 4 | MATH 1502 | a, c |
| Core E - Social Sciences | 3 | HIST 2111 or HIST 2112 or INTA 1200 or POL 1101 or PUBP 3000 | |
| | 9 | Any SS | |
| Core F – Courses Related to Major | 4 | BMED 1000 | |

| | | | |
|---------------------------------------------------|-----|------------------------------------------------------------------------------------|---|
| | 4 | BMED 2210 (*moved from Major field) | c |
| | 2 | COE 2001 | c |
| | 4 | MATH 2401 | a |
| | 4 | MATH 2403 | a |
| | 4 | CHEM 1211K | c |
| | -- | Ethics Requirement | f |
| Major Requirements | 3 | BMED 1300 2250 (*moved from core F) | c |
| * | 3 | BMED 2300 2310 | |
| | 3 | BMED 3100 | |
| | 2 | BMED 3110 | |
| | 4 3 | BMED 3300 3310 | |
| | 4 | BMED 3400 | |
| | 4 3 | BMED 3510 3520 | |
| | 3 | BMED 3600 | |
| | 2 | BMED 3610 | |
| | 3 | BMED 4602 | |
| Other Engineering and Science Requirements | 3 | CHEM 1315 | |
| | 3 | CEE 3770 or ISYE 3770 or BMED 2400 | |
| | 3 | MSE 2001 | |
| | 2 | ECE 3710 | |
| | 1 | ECE 3741 | |
| BMED Depth Electives | 12 | BMED Depth Electives | g |
| BMED Breadth Electives | 15 | BMED Breadth Electives. | h |
| TOTAL: | 131 | | |

Pass-fail only allowed for BMED 1000, Free Electives, Humanities, and Social Sciences. Students must average a 2.0 for all BMED coursework.

NOTES

a = Student must earn a 2.0 average in MATH 1501, 1502, 2401 and 2403.

b = Students must complete an Ethics requirement. See below for allowable Ethics courses.

c = C-minimum required

d = If PHYS 2231 is taken, extra hour goes to Free Electives.

e = If PHYS 2232 is taken, extra hour goes to Free Electives.

f = Students must complete one of the following courses at some point in their program: LMC 3318, PHIL 3105, PHIL 3109, PHIL 3127, or PHIL 4176.

g = BMED 2699, any 3000- or 4000-level BMED course. Maximum of six hours of undergraduate research.

h = Breadth Electives can be satisfied with a minor, certificate, or other coursework. Please consult with advisor on course selection.

**Two courses were switched between Core F and Major Requirements to maintain the 18 hours of courses required in area F after BMED 1000 was removed.*

Minor Modification – Tabled **Minor in Biomedical Engineering**

This proposal will be moved to next agenda.

13. The Committee received an update on the work of the ad-hoc subcommittee assigned to review the UG Minor Guidelines with the aim of increasing the clarity of the overarching regulations governing the development and delivery of minor programs. Members of the group pointed out that reformatting the document to list the program of study, other guidelines, and administrative guidelines would help, overall, in its readability. This change is recommended regardless of whether any of the actual policy is revised.

Item #5 under program of study on the revised document is where most of the discussion occurred. There has been ongoing confusion about what is meant by cluster electives, breadth electives, and technical electives. This confusion arises from multiple instances of different Schools adopting similar expressions, such as “cluster elective,” but with substantially different interpretations. There was concern that some of the proposed additional language put forth is unnecessary and makes the existing rule less clear. There was also concern expressed about the limitation of 6 hours in these blocks of courses.

The philosophical question was also raised about what we wish the minor to be and to do. Some language from another school was offered that describes the minor in a bit of a different way. This may be something we need to consider down the road, after more examination of our philosophy on minors.

The language in the existing policy that the minor must be in fields outside the student’s major is clear. What appears to not be clear, exactly, is how interdisciplinary minors should operate, under what constraints, if any, and whether Schools might use discretion. An example was offered of a major School that might make a case for a minor that would be within a specialized area of the main field. Could a minor be possible with courses from the major, where the content is distinct in some way? The general sense of the discussion was “no”. The only exception would be for some work within an interdisciplinary minor.

Committee members also discussed, briefly, the role of the certificate in all of this. If a major School wants to offer minors that could provide breadth for their students, should that be done with certificates, not minors? The general sense of this discussion was “yes” since a certificate could be an avenue for more in-depth study within a given discipline or major.

It was pointed out that some majors are using breadth electives to force students to complete minors and/or certificates in a field outside the major.

No conclusions were reached and the Chair has called for a Special Meeting of the Committee to specifically address the matters presented and the concerns raised during the initial discussion of this topic. The Registrar will coordinate scheduling of the Special meeting that will held within two weeks.

Given that the meeting had already exceeded the allotted period by one half hour, and consequently there being no time remaining to address new matters, the meeting was adjourned at 5:30pm.

Adjourned,

Reta Pikowsky
Registrar