

**Institute Undergraduate Curriculum Committee
Appeals and Academic Matters (Full Committee)
Tuesday, February 12, 2013**

Present: Smith (ME), Hollengreen (ARCH), Agrawal (CHBE), Pikowsky (REG), Walker (PSYC), Yazek (LMC), Mayor (ME), Sankar (AE), Senf (LMC), Loss (MATH), Wilkinson (CHEM), Isbell (CoC), Berry (PUBP)

Visitors: Laros (REG), Merkousko (REG), Fincannon (BME), Ferri (ME), MacIntyre (IC), Raczynski (CoC), Castro (BC), Snow (APPH), Baron (CHEM), Potts (PROVOST), LeDoux (BME)

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 approve a request from the School of Applied Physiology for a new course and to deactivate an existing course. The motion was seconded and approved.

New Course

APPH 1040: Scientific Foundations of Health 2-0-2

(Note: the abbreviation for the transcript title was changed from Foundations of Health to Sci Foundation of Health)

Deactivated Course

HPS 1040: Applied Physiology (replaced by APPH 1040) 2-0-2
Deactivate Fall 2013

2. A motion was made to approve a request from the School of Building Construction for a degree modification. The motion was seconded and approved.

Rationale

The 2012 report from the external accreditation visiting team of the American Council for Construction Education (ACCE) stated as a weakness of the BSBC curriculum that the number of construction science hours is not sufficient.

BC 4720 Green Construction is a three-hour construction science elective, very popular among BC students. BC 4640 Construction Marketing is a three-hour course that does not

provide content to be included in the construction science category. This course will continue being offered as elective, and will not have a negative impact for accreditation as its three hours were counted for the general construction category, where there is already a surplus of 11 hours.

Proposed Changes:

Add course BC 4710 Green Construction
Delete course BC 4640 Construction Marketing

- No changes in the total program hours or in the hours of core/electives between the current program and the proposed new one.

Current versus Proposed Program Curriculum

| <u>FRESHMAN YEAR</u> | | <u>Fall</u> | <u>Spring</u> |
|------------------------------|--|--------------------|----------------------|
| COA 1011 | Fundamentals of Design and the Built Environment I | 3 | - |
| COA 1012 | Fundamentals of Design and the Built Environment II | - | 4 |
| COA 1060 | Introduction to Design and the Built Environment | 3 | - |
| CS 1315 | Introduction to Media Computation | 3 | - |
| ENGL 1101 | English Composition I | 3 | - |
| ENGL 1102 | English Composition II | - | 3 |
| HIST 2XXX | US/Georgia History (HIST 2111 or 2112 or POL 1101 or PUBP 3000 or INTA 1200) | - | 3 |
| MATH 1501 | Calculus I | 4 | - |
| MATH 1502 | Calculus II | - | 4 |
| | Social Science Elective(s) | - | 3 |
| TOTAL | FRESHMAN YEAR | 16 | 17 |
| <u>SOPHOMORE YEAR</u> | | <u>F</u> | <u>S</u> |
| BC 2600 | Construction Contracting | 3 | - |
| BC 2610 | Construction Technology I | 3 | - |
| BC 2620 | Construction Technology II | - | 3 |
| BC 2630 | Construction Seminar | - | 1 |
| ECON 2100 | Economic Analysis & Policy Problems | - | 3 |
| ACCT 2101 | Accounting I | 3 | - |
| MGT 2200 | Information Technology Management | - | 3 |
| PHYS 2211 | Physics I | 4 | - |
| EAS 2600 | Earth Processes | - | 4 |
| -- | Social Science Elective(s) | 3 | - |
| HPS 1040 | Health and Performance (Required but not counted)* | - | 2 |
| TOTAL SOPHOMORE YEAR | | 16 | 16 |
| <u>JUNIOR YEAR</u> | | <u>F</u> | <u>S</u> |
| BC 3600 | Construction Cost Management | 3 | - |

| | | | |
|---------------------------|---|-----------------|-----------------|
| BC 3610 | Construction Law | - | 3 |
| BC 3620 | Real Estate and Construction Finance & Accounting | - | 3 |
| BC 3640 | Construction Mechanics | 3 | - |
| BC 4620 | Structural Analysis | - | 3 |
| LCC 2/3XXX | Communication Intensive Course | 3 | - |
| MGT 3150 | Principles of Management | 3 | - |
| MGT 3062 | Financial Management | - | 3 |
| OR | | | |
| MGT 3078 | Finance and Investments | - | <3> |
| -- | Professional Electives | 3 | - |
| -- | Humanities Elective(s) | - | 3 |
| -- | Free Electives | 3 | 3 |
| TOTAL JUNIOR YEAR | | 18 | 18 |
| <u>SENIOR YEAR</u> | | <u>F</u> | <u>S</u> |
| BC 3630 | Project Management I | 3 | - |
| BC 4600 | Project Management II | - | 3 |
| BC 4610 | Building Economics | - | 3 |
| BC 4630 | Senior Capstone Project | - | 3 |
| BC 4640 | Construction Marketing | 3 | - |
| BC 4660 | Entrepreneurship in Construction | - | 3 |
| BC 4670 | Construction Industry Issues | 3 | - |
| BC 4680 | Professional Internship | 3 | - |
| MGT 3102 | Managing Human Resources | 3 | - |
| OR | | | |
| MGT 3660 | International Business | <3> | - |
| -- | Professional Elective | - | 3 |
| TOTAL SENIOR YEAR | | 15 | 15 |

BACHELOR OF SCIENCE IN BUILDING CONSTRUCTION – PROPOSED CHANGE HIGHLIGHTED BELOW:

2012 - 2013 DEGREE REQUIREMENTS

| REQUIREMENT | REQ HRS | COURSE(S) | NOTES |
|---------------------------|---------|--|-------|
| Wellness | 2 | HPS 1040 | |
| Core A - Essential Skills | 3 | ENGL 1101 | |
| | 3 | ENGL 1102 | |
| | 4 | MATH 1501 | |
| Core B - Institutional | 3 | CS 1301 or CS 1315 | |

Options

| | | | |
|---|-------------------------|--|--------------------------|
| Core C - Humanities | 3 | Any HUM | |
| | 3 | LCC 2000- or 3000-level HUM | |
| Core D - Science, Math, & Technology | 4 | EAS 2600 | |
| | 4 | PHYS 2211 | a |
| | 4 | MATH 1502 | |
| Core E - Social Sciences | 3 | HIST 2111 or HIST 2112 or INTA 1200 or POL 1101 or PUBP 3000 | |
| | 3 | ECON 2100 | |
| | 6 | Any SS | |
| Core F - Courses Related to Major | 3 | ACCT 2101 or MGT 3000 | |
| | 3 | BC 2600 | |
| | 3 | BC 2610 | |
| | 3 | BC 2620 | |
| | 3 | COA 1011 | |
| | 3 | COA 1060 | |
| | Major Requirements | 4 | COA 1012 |
| 1 | | BC 2630 | |
| 3 | | BC 3600 | |
| 3 | | BC 3610 | |
| 3 | | BC 3620 | |
| 3 | | BC 3630 | |
| 3 | | BC 3640 | |
| 3 | | BC 4600 | |
| 3 | | BC 4610 | |
| 3 | | BC 4620 | |
| 3 | | BC 4630 | |
| 3 | | BC 4640 | |
| 3 | | ADD BC 4710 | |
| 3 | | BC 4660 | |
| 3 | | BC 4670 | |
| 3 | BC 4680 | | |
| Non-Major Required | 3 | MGT 2200 | |

Courses

| | | | |
|------------------------|-----|--|----------|
| | 3 | MGT 3062 or MGT 3078 | |
| | 3 | MGT 3150 | |
| | 3 | MGT 3102 or MGT 3660 | |
| Professional Electives | 6 | ARCH 3000- or 4000-level courses, BC 4699-4900, CE 3000- or 4000-level courses, CP 3000- or 4000-level courses, COA 3000- or 4000-level courses, and MGT 3000- or 4000-level courses | b |
| Free Electives | 6 | Free Electives | |
| TOTAL: | 131 | | |

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

Degree Modification

Bachelor of Science in Aerospace Engineering

The faculty members of the School of AE request that the course LCC 3401 (2-0-2) be replaced with LCC 3403 (3-0-3). This change is requested because LCC 3401 is no longer taught. **NOTE: The subject code for this course is now LMC.**

We also request that the free elective hours be reduced from 10 to 9, to keep the total number of hours the same, at 132.

| | |
|---------------------------------|----|
| MATH 1501 CALCULUS I | 4 |
| ENGL 1101 ENGLISH COMPOSITION I | 3 |
| CHEM 1310 GENERAL CHEMISTRY ** | 4 |
| CS 1371 COMPUTING FOR ENGINEERS | 3 |
| WELLNESS | 2 |
| | 16 |

FIRST YEAR-SPRING

| | |
|---|------------|
| | HRS |
| MATH 1502 CALCULUS II | 4 |
| ENGL 1102 ENGLISH COMPOSITION II | 3 |
| PHYS 2211 INTRODUCTORY PHYSICS I | 4 |
| HIST 2111 or 2112 or POL 1101 or PUBP 3000 or INTA 1200 | 3 |
| AE 1350 INTRODUCTION TO AEROSPACE ENGINEERING | 2 |
| | 16 |

| SECOND YEAR-FALL | | HRS |
|---|--|------------|
| MATH 2401 CALCULUS III | | 4 |
| PHYS 2212 INTRODUCTORY PHYSICS II | | 4 |
| COE 2001 STATICS | | 2 |
| ME/CE 1770 ENGINEERING GRAPHICS & VISUALIZATION | | 3 |
| MSE 2001 PRINCIPLES & APPLICATIONS OF ENGINEERING MATERIALS | | 3 |
| | | 16 |
| SECOND YEAR-SPRING | | HRS |
| AE 2020 LOW SPEED AERODYNAMICS | | 3 |
| AE 2220 DYNAMICS | | 3 |
| TECHNICAL ELECTIVE | | 3 |
| ECON 2100 or 2101 or 2105 or 2106 | | 3 |
| MATH 2403 DIFFERENTIAL EQUATIONS | | 4 |
| | | 16 |
| THIRD YEAR-FALL | | HRS |
| AE 3515 SYSTEM DYNAMICS & CONTROL | | 4 |
| AE 3450 THERMODYNAMICS & COMPRESSIBLE FLOW | | 3 |
| AE 3310 INTRODUCTION TO AEROSPACE VEHICLE PERFORMANCE | | 3 |
| COE 3001 DEFORMABLE BODIES | | 3 |
| LCC 3403 TECHNICAL COMMUNICATIONS | | 3 |
| ECE 3710 CIRCUITS & ELECTRONICS | | 2 |
| | | 18 |
| THIRD YEAR-SPRING | | HRS |
| AE 3125 AEROSPACE STRUCTURAL ANALYSIS | | 4 |
| AE 3521 FLIGHT DYNAMICS | | 4 |
| HUMANITIES ELECTIVE | | 3 |
| ECE 3741 INSTRUMENTATION & ELECTRONICS LAB | | 1 |
| AE 4451 JET & ROCKET PROPULSION | | 3 |
| AE 3051 EXPERIMENTAL FLUID DYNAMICS | | 2 |
| | | 1 |
| | | 7 |
| FOURTH YEAR-FALL | | HRS |
| HUMANITIES ELECTIVE | | 3 |
| CAPSTONE COURSE * | | 3 |
| AE 3021 HIGH SPEED AERODYNAMICS | | 3 |
| AE 3145 STRUCTURES LAB | | 1 |
| SOCIAL SCIENCE ELECTIVE | | 3 |

FREE ELECTIVES

3

16

FOURTH YEAR-SPRING

HRS

| | |
|------------------------------------|----|
| AE 4220 AEROELASTICITY | 3 |
| CAPSTONE COURSE * | 3 |
| SOCIAL SCIENCE ELECTIVE | 3 |
| FREE ELECTIVES | 6 |
| AE 4525 CONTROL SYSTEMS DESIGN LAB | 2 |
| | 17 |

TOTAL PROGRAM HOURS = 130 SEMESTER HOURS PLUS WELLNESS (2 HOURS)

* Capstone Course requirements fulfilled by completing one of these sequences:
(AE 4350 and AE 4351) or
(AE 4356 and AE 4357) or
(AE 4358 and AE 4359)

** The Chemistry requirement may be satisfied with CHEM 1310 (or CHEM 1211K and CHEM 1212K). The extra four hours may be used to satisfy the science electives and free electives.

4. A motion was made to approve a request from the School of Biomedical Engineering for a new course. The motion was seconded and approved.

New Course – Cross-listed with Existing Course

BMED 4740 Biologically Inspired Design 3-0-3

Note: This course is a new cross listing for the already existing course:
BIOL/ISYE/ME/MSE/PTFE 4740 Biologically Inspired Design.
All of the cross-listed units have agreed to this request.

Note: The Committee requested that the Registrar’s Office review the other NCP(s) for the existing course to make certain that they match. If they do not, additional follow-up will be needed.

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

Certificate Modification

Certificate in Pre-Law

Two of those electives have been previously offered as MGT 4803 Special Topics classes: Technology Law & Ethics and Legal Aspects of Real Estate. We exercised our local authority to apply it toward the minor/certificate. Now that the classes have been re-numbered as MGT 3608 and MGT 3609 we request authorization to apply the newly re-numbered class toward the LS&T minor and Pre-Law certificate.

We have also updated our list of electives to reflect these changes and to include additional Special Topics classes that we are currently using. One additional change was made to update the subject code of PST 3113 to the current subject code of PHIL 3113 on the elective list.

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).

Students working toward the pre-law certificate must take one of the following core menu courses:

1. PUBP 3000 American Constitutional Issues
2. PUBP 3016 Judicial Process
3. PUBP 3610 Pre-Law Seminar
4. PUBP 4609 Legal Practice

Course List

Core Course Options

PUBP 3000 Constitutional Issues

PUBP 3016 Judicial Process

PUBP 3610 Pre-Law Seminar

PUBP 4609 Legal Practice

Electives

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 3608 Technology Law and Ethics

MGT 3609 Legal Aspects of Real Estate

MGT 4010 Business Taxation

~~PST 3113 Logic and Critical Thinking~~

PHIL 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: Business and Government Regulation

MGT 480# Special Topics: Corporate Governance

MGT 480# Special Topics: Principles of Commercial Law

MGT 480# Special Topics: Law for Entrepreneurs

~~MGT 480# Special Topics: Legal Aspects of Real Estate~~

~~MGT 480# Special Topics: Technology Law and Ethics~~

PHIL 480# Special Topics: Health Care Law, Policy, and Management/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: Race, Gender, and the Fourteenth Amendment

PUBP 480# Special Topics: Health Care Law, Policy, and Management/Ethics

PUBP 480# Special Topics: History of American 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)

Also, special problems courses, as designated by the Director of the Law, Science & Technology Program on a case-by-case basis, may be counted toward the elective requirements for the Certificate and Minor.

*Note 1: INTA majors MAY NOT count this course as an elective toward the Certificate or Minor because it is required by name and number for the INTA major. This is an Institute rule for Certificates and Minors.

**Note 2: Management majors MAY NOT count these courses as electives toward the Certificate or Minor because they are required by name and number for the Management major. This is an Institute rule for Certificates and Minors.

Minor Modification

Minor in Law, Science, and Technology

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

The LS&T minor and Pre-Law certificate require students to take one of four core menu classes. The remaining classes are electives.

Two of those electives have been previously offered as MGT 4803 Special Topics classes: Technology Law & Ethics and Legal Aspects of Real Estate. We exercised our local authority to apply it toward the minor/certificate. Now that the classes have been re-numbered as MGT 3608 and MGT 3609 we request authorization to apply the newly re-numbered class toward the LS&T minor and Pre-Law certificate.

We have also updated our list of electives to reflect these changes and to include additional Special Topics classes that we are currently using. One additional change was made to update the subject code of PST 3113 to the current subject code of PHIL 3113 on the elective list.

Law, Science & Technology Minor

Course List

Students working toward the minor must take a total of fifteen semester hours of applicable credit (twelve semester hours at the 3000 level or above). No more than 9 semester hours of Special Topics courses may be included in a minor program.

Students working toward the minor must take one of the following core menu courses:

Core Course Options

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

Electives

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 3608 Technology Law and Ethics
MGT 3609 Legal Aspects of Real Estate
MGT 4010 Business Taxation
~~PST 3113 Logic and Critical Thinking~~
PHIL 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: Business and Government Regulation
MGT 480# Special Topics: Corporate Governance

MGT 480# Special Topics: Principles of Commercial Law
 MGT 480# Special Topics: Law for Entrepreneurs
~~MGT 480# Special Topics: Legal Aspects of Real Estate~~
~~MGT 480# Special Topics: Technology Law and Ethics~~
 PHIL 480# Special Topics: Health Care Law, Policy, and Management/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: Race, Gender, and the Fourteenth Amendment
 PUBP 480# Special Topics: Health Care Law, Policy, and Management/Ethics
 PUBP 480# Special Topics: History of American 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)

Also, special problems courses, as designated by the Director of the Law, Science & Technology Program on a case-by-case basis, may be counted toward the electives requirements for the Certificate and Minor.

*Note 1: INTA majors MAY NOT count this course as an elective toward the Certificate or Minor because it is required by name and number for the INTA major. This is an Institute rule for Certificates and Minors.

**Note 2: Management majors MAY NOT count these courses as electives toward the Certificate or Minor because they are required by name and number for the Management major. This is an Institute rule for Certificates and Minors.

6. A motion was made to approve a request from the School of Mechanical Engineering for a degree modification, new courses, modification of prerequisites, and deactivation of a course. The motion was seconded and approved.

Degree Modification

Bachelor of Science in Mechanical Engineering

The request includes:

1. New Course Proposal: ME3210 Design, Materials, and Manufacture
2. Replace BSME requirement of ME 4210 with ME 3210 (pre-approved substitution during transition period)
3. New Course Proposal: ME4215 Manufacturing Process Analysis
4. Establish a fifth Concentration Area, *Manufacturing*, within the undergraduate Mechanical Engineering degree program.
5. Deactivate ME4210 Manufacturing Processes and Engineering
6. Pre-requisite change for required course, ME 4182 Capstone Design. New pre-requisite list (additions in red, deletions with strikethrough):

ME2110, **ME3210**, ~~ME4210~~*, (ME3180 or ME4315).

7. Information Item: Pre-requisite change for elective course, ME4189 Structural Vibration.
Current prerequisites: MATH 1502, MATH 2403, and ME3015
Proposed prerequisites: **ME2202**, MATH 2403 or **MATH 2413** (Honors Differential Equations), or **MATH 24X3** Differential Equations (Transfer).

Rationale

ME3210 is a new, required class that will replace ME4210 in the BSME curriculum. ME3210 contains much of the material of ME4210, but it is more “qualitative” in nature. It covers the basic manufacturing processes and introduces students to the uses and limitations of each process. It also focuses on *design for manufacture* and on *process planning* to fabricate parts. ME3210 is intended to be taken in the student’s junior year, giving them a more-timely introduction to manufacturing before they take ME4182 Capstone Design. The modeling and analysis material currently in ME4210 will be moved to a new course, ME4215, and expanded. Note that ME3210 is a pre-requisite to ME4215.

We also request the establishment of a new Concentration Area (CA) in *Manufacturing*. As seen below, one of the required courses in the Manufacturing CA is ME4215. ME students will now have 5 concentration areas to choose from: *Automation and Robotics*, *Thermal, Fluid, and Energy Systems*, *Mechanics of Materials*, *Manufacturing*, and *Micro- and Nanoengineering*.

The main difference is that all ME students will now take ME3210 in their junior year as opposed to ME4210 in their senior year. Students choosing to pursue a concentration area will have one more option available to them- Manufacturing.

BSME degree requirements, 2012-2013 Curriculum Year

As approved 7/24/12 by IUCC; additions in red, deletions indicated by strikethrough.

| FIRST YEAR - FALL | Pre-Requisites | COURSE HRS | Notes |
|--|---|------------|----------|
| MATH 1501 Calculus I | | (4-0-4) | [1] |
| ENGL 1101 English Composition I | | (3-0-3) | |
| CHEM 1310 General Chemistry | | (3-3-4) | [2] |
| US Perspectives Elective | | (3-0-3) | [3] |
| HPS 1040 Wellness | | (2-0-2) | |
| FIRST YEAR - SPRING | TOTAL SEMESTER HOURS | 16 | |
| MATH 1502 Calculus II | MATH 1501 | (4-0-4) | [1] |
| ENGL 1102 English Composition II | | (3-0-3) | |
| PHYS 2211 Introductory Physics I | MATH 1501 | (3-3-4) | [1] |
| CS 1371 Computing for Engineers | | (3-0-3) | |
| ME/CEE 1770 Engineering Graphics | | (2-3-3) | [4] |
| SECOND YEAR - FALL | TOTAL SEMESTER HOURS | 17 | |
| MATH 2401 Calculus III | MATH 1502 | (4-0-4) | [1] |
| PHYS 2212 Introductory Physics II | PHYS 2211 | (3-3-4) | |
| ME 2110 Creative Decisions and Design | ME/CEE 1770, COE 2001* | (2-3-3) | [4] |
| MSE 2001 Engineering Materials | CHEM 1310 | (3-0-3) | |
| COE 2001 Statics | MATH 1502, PHYS 2211 | (2-0-2) | [1] |
| SECOND YEAR - SPRING | TOTAL SEMESTER HOURS | 16 | |
| MATH 2403 Differential Equations | MATH 1502 | (4-0-4) | [1] |
| ECE 3710 Circuits and Electronics | PHYS 2212 | (2-0-2) | |
| ME 2202 Dynamics of Rigid Bodies | COE 2001 | (3-0-3) | |
| ME 2016 Computing Techniques | CS 1371, MATH 1502, MATH 2403* | (3-0-3) | |
| Global Perspectives Elective | | (3-0-3) | [5,6,7] |
| THIRD YEAR - FALL | TOTAL SEMESTER HOURS | 15 | |
| ECE 3741 Instrument and Electronics Lab | ECE 3710 | (0-3-1) | |
| COE 3001 Mechanics of Deformable Bodies | COE 2001, MATH 2403* | (3-0-3) | |
| ME 3322 Thermodynamics | PHYS 2211, MATH 2403 | (3-0-3) | |
| ME 3340 Fluid Mechanics | ME2202, ME 3322*, MATH 2401, MATH 2403 | (3-0-3) | |
| Free Elective | | (3-0-3) | [8,9,10] |
| Economics Elective | | (3-0-3) | [11,12] |
| THIRD YEAR - SPRING | TOTAL SEMESTER HOURS | 16 | |
| ME 3017 System Dynamics | CS 1371, MATH 2403, ME 2202, and ECE 3710 | (3-0-3) | |
| ME 3345 Heat Transfer | ME 3322, ME 3340, MATH 2403 | (3-0-3) | |
| Ethics Elective | | (3-0-3) | [7,13] |
| ME 3210 Design, Materials, and Manufacture | ME 2110, MSE 2001 | (3-0-3) | |
| MATH/ISYE 3770 Statistics | MATH 2401 | (3-0-3) | |
| ISYE 3025 Engineering Economics | ECON 2100, ECON 2101, ECON 2105, or ECON 2106 | (1-0-1) | |

| FOURTH YEAR - FALL | TOTAL SEMESTER HOURS | 16 | |
|---|--|---------|------------|
| Design Elective | ME 2110, COE 3001 (for ME 3180 only), ME 3345 (for ME 4315 only) | (3-0-3) | [14,15] |
| ME 3057 Experimental Methods Laboratory | COE 3001, ME 3340, ME 3015*, ME 3345*, MATH/ISYE 3770* | (2-3-3) | [4] |
| Social Science or Humanities Elective | | (3-0-3) | [7] |
| Free Elective | | (3-0-3) | [8,9,10] |
| Free Elective | | (3-0-3) | [8,9,10] |
| FOURTH YEAR - SPRING | TOTAL SEMESTER HOURS | 15 | |
| ME 4182 Capstone Design | ME 2110, ME 3210, ME 4210*, (ME 3180 or ME 4315) | (1-6-3) | [4] |
| ME 4056 ME Systems Laboratory | ME 3017, ME 3057, ME 3345, MATH/ISYE 3770 | (2-3-3) | [4] |
| ME 4210 Manufacturing Processes and Engineering | COE 3001, ME 3345, MATH/ISYE 3770 | (3-0-3) | |
| ME Elective | | (3-0-3) | [8,16] |
| Social Science or Humanities Elective | | (3-0-3) | [7] |
| Free Elective | | (3-0-3) | [8,9,10] |
| Free Elective | | (3-0-3) | [8,9,10] |
| TOTAL SEMESTER HOURS | | 18 | |
| TOTAL PROGRAM HOURS INCLUDING WELLNESS (2 HOURS) = | | | 129 |

Notes:

- [1] Students must attain a grade of C-or-better in MATH 1501, MATH 1502, MATH 2401, MATH 2403, PHYS 2211, and COE 2001 *before* they can move on to another course for which those courses are a pre-requisite.
- [2] CHEM 1211K can substitute for CHEM 1310. CHEM 1211K & 1212K are recommended for pre-health students.
- [3] HIST 2111 or 2112 or POL 1101 or PUBP 3000 or INTA 1200; counts as Social Science
- [4] Cannot be dropped after registration without documented medical reason
- [5] Required for students who began Fall 2011 and later
- [6] Approved Global Perspectives course (www.catalog.gatech.edu/students/ugrad/core/gp.php) must be included in the Social Science and Humanities elective hours.
- [7] Between the Ethics Elective, Global Perspectives Elective, Social Science Electives, and Humanities Electives, students must ensure 12 hours of SS and 12 hrs of HUM. A listing of classes that qualify as Social Science or Humanities may be found at: www.catalog.gatech.edu/students/ugrad/core/core.php.

- [8] Free Electives and ME Electives may not duplicate any other material used to satisfy the BSME degree requirements
- [9] Any GT course with the restrictions that: At least 9 hours must be at the 2000-level or above. Four of these 9 hours may be satisfied with one of the following: BIOL 1510, BIOL 1520, or CHEM 1212K.
- [10] Up to 6 hours of Free Elective may be satisfied using 2699/4699/4903 from any department
- [11] ECON 2100, 2101, 2105, or 2106 (counts as Social Science)
- [12] Students can receive credit for only one of ECON 2100, ECON 2101, ECON 2105, and ECON 2106. The only exception is that students can receive 6 hours credit for both ECON 2105 and ECON 2106.
- [13] Social Science options: HTS 2084 and INTA 2030; Humanities options: PHIL 3105, PHIL 3109, PHIL 3127, or PHIL 4176
- [14] ME 3180 or ME 4315
- [15] Students may take both ME 3180 and ME 4315; in this case, one class will satisfy the Design Elective and the other will satisfy the ME Elective
- [16] An ME elective is any ME course at the 3000-level or above, excluding ME 3141, 3720, 3743, 3744, 4699, 4741, 4742, 4753, and 4903.

Additional Information:

1. Courses marked by * designate “Pre-requisite with Concurrency,” i.e., these courses may be taken at the same time or prior to the course in question.
2. All classes must be taken for Letter Grade
3. ENGL 1101 and 1102 must be completed before earning 45 credit hours.
4. Overall GPA must be greater than 2.00 at graduation
5. The ME GPA is computed from all courses in the “Mechanical Engineering Core,” the “Engineering Design and Professional Practice Stem,” the Design Elective, and ME Elective. Students must have an ME GPA of at least 2.00 at the time of graduation. When computing the ME GPA: (i) Transfer courses and foreign exchange courses are not included, (ii) No course can be taken pass/fail, (iii) If a course is repeated, only the last grade is included in the calculation.
4. Among the courses used to compute the ME GPA, all courses must be completed with a C-or-better, with the exception of at most 9 credit hours, which can be satisfied with a grade of D

New Courses

ME 3210: Design, Materials, and Manufacture 3-0-3

ME 4215: Structural Vibration 3-0-3

Modify Prerequisites

Pre-requisite change for required course: **ME 4182 Capstone Design**.

New pre-requisite list (additions in red, deletions with strikethrough):
ME2110, **ME3210**, ~~ME4210*~~, (ME3180 or ME4315).

Pre-requisite change for elective course: **ME 4189 Structural Vibration**.

Current prerequisites: MATH 1502, MATH 2403, and ME3015

Proposed prerequisites: **ME2202**, MATH 2403 or **MATH 2413** (Honors Differential Equations), or **MATH 24X3** Differential Equations (Transfer).

Deactivate Course

ME4210 Manufacturing Processes and Engineering

ME3210 is a new, required class that will replace ME4210 in the BSME curriculum. ME3210 contains much of the material of ME4210, but it is more “qualitative” in nature. All ME students will now take ME3210 in their junior year as opposed to ME4210 in their senior year. The modeling and analysis material currently in ME4210 will be moved to a new course, ME4215, and expanded.

7. A motion was made to approve a request from the School of Chemistry and Biochemistry for a minor modification, change a course title, modify prerequisites, and deactivate courses (one deactivation request was denied – see below). The motion was seconded and approved.

Minor Modification

Minor in Chemistry

Add CHEM 3700 Alternative Energy (3 credits) as a course elective.

Currently Approved vs. Proposed Program Curriculum:

The Chemistry minor will comprise at least 15 credit hours of **approved** CHEM classes, of which at least 9 credit hours are upper-division coursework (numbered 3000 or above).

- 1) Courses at the 1000 level may NOT be counted toward the minor.

- 2) A maximum of 3 credit hours of Special Topics courses may be included in the minimum 15 credit hours of a minor program.
- 3) A maximum of 3 credit hours of CHEM 4699 (Undergraduate Research) may be used toward the minor.
- 4) All courses counting toward the minor must be completed with an average GPA of at least 2.0. A minimum of six of these credit hours must be taken in residence at Georgia Tech.
- 5) All courses counting toward the minor must be completed on a letter-grade basis.
- 6) Courses required by name and number and/or used to satisfy Core Areas A through E in a student's major degree program may not be used in satisfying the course requirements for a minor. Courses used in a minor also may be used to fulfill free electives, or technical electives.

The 15 credit hours applied to the chemistry minor must be comprised of any combination of the following courses listed below and still meet requirements 1-6 above:

CHEM 2211 Quantitative Analysis (3 credits)
 CHEM 2311 Organic Chemistry I (3 credits)
 CHEM 2312 Organic Chemistry II (3 credits)
 CHEM 2380 Synthesis Lab I (2 credits)
 CHEM 3111 Advanced Inorganic Chemistry (3 credits)
 CHEM 3211 Analytical Chemistry (5 credits)
 CHEM 3281 Instrumental Analysis (4 credits)
 CHEM 3380 Synthesis Lab II (3 credits)
 CHEM 3411 Physical Chemistry I (3 credits)
 CHEM 3412 Physical Chemistry II (3 credits)
 CHEM 3481 Physical Chemistry Lab (2 credits)
 CHEM 3511 Survey of Biochemistry (3 credits)
 CHEM 3700 Alternative Energy (3 credits)
 CHEM 4311 Advanced Organic Chemistry (3 credits)
 CHEM 4341 Applied Spectroscopy (3 credits)
 CHEM 4452 Chemistry of the Solid State (3 credits)
 CHEM 4699 Undergraduate Research
 CHEM 4740 Atmospheric Chemistry (3 credits)
 CHEM 4775 Polymer Science and Eng. I (3 credits)
 CHEM 4776 Polymer Science and Engi. II (3 credits)
 CHEM 4803 Special Topics (with approval of Director, Undergraduate Studies)
 CHEM 6XXX Chemistry Elective (with approval of Director, Undergraduate Studies)
 CHEM 8XXX Graduate courses (with approval of Director, Undergraduate Studies)

Minor Modification

Minor in Biochemistry

Revise BCHM minor to require CHEM 4511 Biochemistry I and CHEM 4512 Biochemistry II, in addition to 9 additional hours.

Currently Approved vs. Proposed Program Curriculum:

~~The Biochemistry minor must comprise at least 15 credit hours of **approved** biochemistry related courses, of which at least 12 credit hours are upper-division coursework (numbered 3000 or above).~~

The Biochemistry minor must comprise at least 15 credit hours of **approved** biochemistry related courses and must comprise CHEM 4511 and CHEM 4512 and at least 6 credit hours upper-division coursework (numbered 3000 or above).

- 1) Courses at the 1000 level may NOT be used toward the minor.
- 2) A maximum of 3 credit hours of Special Topics (in biochemistry) courses may be included in the minimum 15 credit hours of a minor program.
- 3) A maximum of 3 credit hours of CHEM 4699 (Independent Research) may be used toward the minor.
- 4) All courses counting toward the minor must be completed with an overall average GPA of at least 2.0. A minimum of six of these credit hours must be taken in residence at Georgia Tech.
- 5) All courses counting toward the minor must be completed with on a letter grade basis.
- 6) Courses required by name and number and/or used to satisfy Core Areas A through E in a student's major degree program may not be used in satisfying the course requirements for this minor. However, courses used in a minor also may be used to fulfill free electives or technical electives.

~~The 15 credit hours applied to the Biochemistry Minor must be comprised of any combination of the following courses (3 semester hour each) listed below and still meet requirements 1-6 above:~~

The 15 credit hours applied to the Biochemistry Minor must be comprised of CHEM 4511 and 4512 and 9 hours of any combination of the courses (3 semester hour each) listed below and still meet requirements 1-6 above. If CHEM 2312 is a major degree requirement (item 6 above), one of the following approved chemistry courses may be substituted.

| | |
|-----------------|---|
| CHEM 2312 | Organic Chemistry II (*pre-requisite to CHEM 4511) |
| CHEM 3411 | Physical Chemistry I (**pre-requisite to CHEM 4521) |
| CHEM 4511*/6501 | Biochemistry I |
| CHEM 4512/6502 | Biochemistry II |
| CHEM 4521** | Biophysical chemistry |
| CHEM 4581 | Biochemistry Lab I |
| CHEM 4582 | Biochemistry Lab II |
| CHEM 4699 | Independent Research |
| CHEM 4803 | Special Topics (with approval of Director, Undergraduate Studies) |

CHEM 65XX Graduate level biochemistry courses
CHEM 85XX Graduate level biochemistry courses

Change in Course Title

CHEM 3111 Inorganic Chemistry 3-0-3

Previously there was a course numbered CHEM 1311 Inorganic Chemistry I, which was deactivated in July 2011 (IUCC project number 577).

CHEM 3111, the subject of this proposal is currently titled “Inorganic Chemistry II”. We are proposing that the title of the course be changed to “Inorganic Chemistry”.

Note: This change prompted some discussion. The Registrar’s Office has traditionally been very reluctant to allow for a change in a course title without also assigning a new number. In this case, the change is to remove the number from the title. Leaving it as is would result in confusion due to the fact that there is no longer a “I”. There could be confusion as well by making this change, so it is not a perfect solution. The record of the course will be kept intact by use of date ranges in the data base to reflect the old title and the new one. The Registrar reiterated that we do need to exercise caution in this area. A course title that changes enough to appear to be a different course entirely when the content actually remains the creates a record-keeping problem and is confusing to both student and reviewers of the transcript. The reverse is also true. If the content changes significantly, and the course title does not, the viewer of the record could be misled. There is no threshold as to when, precisely, a new number must be associated with such a change. Discussion of these cases when they arise is therefore very important.

Modify Prerequisites

CHEM 4581 Biochemistry Lab I

The pre-requisites for CHEM 4581 Biochemistry Lab I should be CHEM 4511, and CHEM 3371 or CHEM 3380. We are requesting approval to remove CHEM 3511 Survey of Biochemistry as a pre-req.

Rationale: The rationale for the change is to address discrepancies between the current GIT Catalog listings and the current School of Chemistry and Biochemistry requirements for course prerequisites. These discrepancies exist due to a process in OSCAR whereby course prerequisite listings are drawn from the GT catalog rather than the previous semester offering. This proposal ensures that all official records reflect the correct prerequisites.

Deactivate Courses

CHEM 4681 – Advanced Chemistry Lab (5 credits) – Approved
CHEM 3281 – Instrumental Analysis (4 credits) –DENIED

(Note: It was suggested that the School come back in a year or so to again request deactivation of CHEM 3281 because by that time they will have a solid sense of whether this course will ever be needed again.)

CHEM 4681 was replaced by CHEM 4684 Advanced Chemistry Lab (4 credits) starting in Fall 2009 (IUCC project 271).

There are no longer students that have taken CHEM 4681 that have not graduated.

Growth in the BSBCHM program has decreased the laboratory space available for CHEM 3281. Less than one section of the CHEM 3281 lab course filled the last 3 years and the lab room space is required for CHEM 3211 Analytical Chemistry Lab. CHEM 3281 is an elective for BSCHBE majors. CHEM 3511 Survey of Biochemistry satisfies the same CHBE degree requirement and has adequate capacity. CHBE concurs with this recommendation.

8. A motion was made to approve a request by the College of Computing and the School of Literature, Media, and Communication for a degree modification and a new course. The motion was seconded and approved.

Degree Modification

Bachelor of Science in Computational Media

The School of Literature, Media, and Communication and the College of Computing would like to modify the existing BSCM to eliminate CS 4911 (3 hours) and CS 4901 (1 hour) as required capstone courses and to replace them with a single CS 4912 (3) course.

We would also like to restore CS 4001 as a required CS course.

We would like to combine and condense two courses, CS 4911 (3 hours) and CS 4901 (1 hour), into one: CS 4912 (3 hours). CS 4911 currently provides instruction in communication and software engineering management protocols as students complete a client-based project, and CS 4901 requires that students refine their written communication skills as they complete a reflective essay. If approved, CS 4912 will be restricted to CM majors and will provide specialized training in communication and project development processes more specific to Computational Media. Students will complete a reflective essay as a natural extension of the goals of this class. The one hour freed by the elimination of CS 4901 will be diverted to free elective hours.

CS 4001 Computing and Society, the CS class with the ethics attribute, was a requirement for Computational Media from the degree's creation in 2004 until the degree modification in fall 2011 that is reflected in the 2012-13 catalog. The Computational Media Undergraduate Curriculum Committee had no intention to drop the requirement; its omission was an oversight, and this proposal seeks to restore the previously existing class to the curriculum.

The College of Computing has experimented with CM-specific sections of CS 4911 in the past, and students and faculty agree that such courses benefit CM majors. Associate Professor Mark Guzdial has recently agreed to take on the instruction of the CM capstone as an additional teaching responsibility for the foreseeable future, so the creation of a CM-specific course number, CS 4912, is appropriate at this juncture.

ABET and other accrediting bodies prefer to see an ethics requirement in computing degrees, and the members of the CM UCC agree that CS 4001 is worthwhile for CM majors.

The substitution of CS 4912 for CS 4911 and CS 4901 will combine and condense two currently required classes totaling four hours into one three-hour class, releasing one hour to students' free elective options.

The restoration of CS 4001 to the curriculum will require that students replace 3 hours of free electives with CS 4001.

Together, these degree modifications will result in the loss of two hours of free elective credits for CM majors.

The instructor of CS 4912 will teach the class in addition to his current teaching load, so the proposal requires no change to administration and support areas.

The replacement of CS 4911 and CS 4901 with CS 4912 and the replacement of elective hours with CS 4001 are reflected in the attached degree requirements and eight-semester plan.

Current and Proposed New BSCM Degree Requirements (compared with changes highlighted)

| 2012-13 Current Requirements | | Proposed Requirements | |
|---|--------------|---|--------------|
| First Year: FALL | Hours | First Year: FALL | Hours |
| ENGL 1101 | 3 | ENGL 1101 | 3 |
| MATH 1501 | 4 | MATH 1501 | 4 |
| CS 1301 | 3 | CS 1301 | 3 |
| HIST 2111 or 2112 or INTA 1200 or POL 1101 or PUBP 3000 | 3 | HIST 2111 or 2112 or INTA 1200 or POL 1101 or PUBP 3000 | 3 |
| GT 1000 CM (free elective) | 1 | GT 1000 CM (free elective) | 1 |
| Total Semester Hours | 14 | Total Semester Hours | 14 |
| First Year: SPRING | Hours | First Year: SPRING | Hours |
| ENGL 1102 | 3 | ENGL 1102 | 3 |
| MATH 1502 | 4 | MATH 1502 | 4 |
| CS 1331 - Intro to Obj. Oriented Programming | 3 | CS 1331 - Intro to Obj. Oriented Programming | 3 |
| CS 2050 - Constructing Proofs | 3 | CS 2050 - Constructing Proofs | 3 |
| SOCIAL SCIENCE ELECTIVE | 3 | SOCIAL SCIENCE ELECTIVE | 3 |
| Total Semester Hours | 16 | Total Semester Hours | 16 |
| Second Year: FALL | Hours | Second Year: FALL | Hours |
| CS 1332 - Data Structures and Algorithms | 3 | CS 1332 - Data Structures and Algorithms | 3 |
| LCC Thread | 3 | LCC Thread | 3 |
| LCC 2700 | 3 | LCC 2700 | 3 |
| MATH 2605 | 4 | MATH 2605 | 4 |

| | | | |
|---|--------------|---|--------------|
| LCC Thread | 3 | LCC Thread | 3 |
| Total Semester Hours | 16 | Total Semester Hours | 16 |
| Second Year: SPRING | Hours | Second Year: SPRING | Hours |
| CS 2261 - Media Device Arch. | 4 | CS 2261 - Media Device Arch. | 4 |
| CS 2340 - Objects and Design | 3 | CS 2340 - Objects and Design | 3 |
| LCC Thread | 3 | LCC Thread | 3 |
| SOCIAL SCIENCE ELECTIVE | 3 | SOCIAL SCIENCE ELECTIVE | 3 |
| HUMANITIES ELECTIVE | 3 | HUMANITIES ELECTIVE | 3 |
| Total Semester Hours | 16 | Total Semester Hours | 16 |
| Third Year: FALL | Hours | Third Year: FALL | Hours |
| CS Thread (Media, People, or Intelligence) | 3 | CS Thread (Media, People, or Intelligence) | 3 |
| LCC Thread | 3 | LCC Thread | 3 |
| LCC Thread | 3 | LCC Thread | 3 |
| HUMANITIES ELECTIVE (LCC course) | 3 | HUMANITIES ELECTIVE (LCC course) | 3 |
| LAB SCIENCE | 4 | LAB SCIENCE | 4 |
| Total Semester Hours | 16 | Total Semester Hours | 16 |
| Third Year: SPRING | Hours | Third Year: SPRING | Hours |
| CS Thread (Media, People, or Intelligence) | 3 | CS Thread (Media, People, or Intelligence) | 3 |
| LCC Thread | 3 | LCC Thread | 3 |
| LCC Thread | 3 | LCC Thread | 3 |
| LAB SCIENCE | 4 | LAB SCIENCE | 4 |
| HPS 1040 | 2 | HPS 1040 | 2 |
| Total Semester Hours | 15 | Total Semester Hours | 15 |
| Fourth Year: FALL | Hours | Fourth Year: FALL | Hours |
| CS Thread (Media, People, or Intelligence) | 3 | CS Thread (Media, People, or Intelligence) | 3 |
| LCC Thread | 3 | LCC Thread | 3 |
| CS Thread (Media, People, or Intelligence) | 3 | CS Thread (Media, People, or Intelligence) | 3 |
| LCC Thread | 3 | LCC Thread | 3 |
| CS Thread (or FREE ELECTIVE) | 3 | CS Thread (or FREE ELECTIVE) | 3 |
| Total Semester Hours | 15 | Total Semester Hours | 15 |
| Fourth Year: SPRING | Hours | Fourth Year: SPRING | Hours |
| Capstone CS 4911 + CS 4901 | 4 | Capstone CS 4912 | 3 |
| FREE ELECTIVE | 3 | CS 4001 - Computing and Society | 3 |
| SOCIAL SCIENCE ELECTIVE | 3 | SOCIAL SCIENCE ELECTIVE | 3 |
| CS Thread (or FREE ELECTIVE) | 3 | CS Thread (or FREE ELECTIVE) | 3 |
| FREE ELECTIVE | 1 | FREE ELECTIVE | 2 |
| Total Semester Hours | 14 | Total Semester Hours | 14 |
| Total Program Hours | 122 | Total Program Hours | 122 |

New Course

CS 4912: Design Capstone Project 3-0-3

- A motion was made to approve a request from the School of Literature, Media, and Communication for a degree modification, new courses, approval of Core Curriculum attributes for new courses, change in subject code for existing courses, and assignments of Core Curriculum attributes to the existing courses under the new subject code. The motion was seconded and approved.

Note: Approval of Core Curriculum attributes will be reviewed by the General Education Subcommittee which will make the final recommendation to the IUCC.

Degree Modification – Change in the Name of the Degree

Change name **from:** Bachelor of Science in Science, Technology and Culture
to Bachelor of Science in Literature, Media, and Communication (with concentrations)

Degree Modification

In response to the recommendation of the 2010 Board of Regents Review team and to the evolving research interests of the faculty, the Literature, Media, and Communication Undergraduate Curriculum Committee and the faculty of LMC recommend that the B.S. in Science, Technology, and Culture (BSSTC) be revised to follow a “threaded” curriculum. The current curriculum is included in Appendix D and is available in the GT 2012-13 catalog here: <http://www.catalog.gatech.edu/colleges/cola/lcc/ugrad/bsstac/geninfo.php>.

Specifically, we propose a curriculum in which all students take three core classes and then choose any two threads of 21 hours each. Required core courses include a team-taught introduction to the major (LMC 2800), a sophomore seminar (LMC 2850), and a capstone seminar or thesis (LMC 4100, 4200, 4300, 4400, 4500, 4600, or 4102), each of which will expose students to the main foci of the School. Threads include the School’s major subject areas: Literature; Media; Communication; Interaction Design; Social Justice; and Science, Technology, and Culture.

We believe a switch to a threaded model will empower students to better comprehend and articulate the areas of specialization within their degree program. The revised curriculum will also better reflect the research and pedagogical strengths of our current film studies and digital media faculty, whose disciplines were not effectively showcased in the now 22-year-old STAC degree.

The proposed threaded LMC degree program accords with the existing curricular model already embraced by LMC with the BS in Computational Media. This model has been successful in the College of Computing as well as in the Ivan Allen College, where Modern Languages has paired modular components of its curriculum with Economics and International Affairs.

Moreover, the threaded BSLMC degree addresses a concern identified by the BOR review team in 2010. According to that review team, the School should undertake “a

reconfiguration or streamlining of ‘tracks’ within the STAC major.” The same team also proposed that *“the STAC major change its name.”*

In his response to these recommendations Interim Dean Kenneth Knoespel suggested that we consider carefully the recently threaded CM curriculum as a model for streamlining the tracks available within the degree and that we also look for opportunities to turn the STAC tracks into new minors. In response to the suggestion that we change the name of STAC, he wrote, “Impetus for changing the name appears first and foremost as a ‘branding issue.’ At present the name hinders the degree from being recognized by a national and international audience. . . . A change in name would also enhance recruitment and facilitate the placement of graduates.”

The new degree plan was constructed with these goals and with the research and pedagogical strengths of the current faculty in mind. The proposed LMC degree is modeled on the current CM degree, and we anticipate several new minors as a possible outcome of threaded division of LMC classes. Because three of the threads focus on the disciplinary strengths reflected in the new name of the school, the proposal satisfies meaningfully the impulse to clarify the degree through rebranding. Additionally, because the threaded model acknowledges different disciplines and requires that those disciplines be placed in conversation with each other or with an already multidisciplinary theme (Social Justice or Science, Technology, and Culture), it internalizes the interdisciplinary values articulated in the Institute’s strategic plan.

The proposed degree also responds to programmatic assessment data. Specifically, the addition of a sophomore seminar will address the low scores for our “Interpretive Frameworks” and “Historical Analysis” learning objectives, which have been documented in OATS and have been declining since 2004. Because the seminar will include a survey of intellectual movements, we expect to address students’ persistent shortcomings in these areas.

The primary difference between the current BSSTAC and the proposed BSLMC is the division of classes across six specialized threads. While STAC emphasized breadth by requiring students to take 6-9 hours from each of four different categories of classes, LMC will allow students to specialize in just the two fields represented by their thread selections. The cross-disciplinary knowledge represented by the old degree will still be provided by the Introduction to LMC (LMC 2800), which will feature three faculty members—one each from the Literature, Media or Interaction Design, and Communication threads—and by the Seminar in LMC (LMC 2850), which will include a survey of intellectual movements that serves equally the various disciplines within LMC. Because students must choose two threads, and because two of the thread options are themselves already interdisciplinary, students will still enjoy breadth of subject area while satisfying employers’ demands for increasing specialization. It is important to note, too, that the breadth of the STAC degree is still

available to students who choose the Science, Technology, and Culture thread as one of their two options, and students may use the LMC elective required in each thread to pursue areas of interest outside their thread combinations.

The number of hours required for the degree remains the same at 122.

The threaded design of the LMC degree is intended to generate 15 distinct concentrations, major who elects to pursue the **Media** thread and the **Interaction Design** thread would complete an LMC degree with the **Media-Interaction Design concentration**.

A list of the possible concentrations is available below with recommended abbreviations for concentration titles that exceed 30 characters:

- Literature-Media (16 characters)
- Literature-Communication (24)
- Literature-Interaction Design (29)
- Literature-Social Justice (26)
- Literature-Science, Technology, and Culture (43)/Literature-STAC (15)
- Media-Communication (19)
- Media-Interaction Design (24)
- Media-Social Justice (21)
- Media-Science, Technology, and Culture (38)/Media-STAC (10)
- Communication-Interaction Design (32)/Comm.-Interaction Design (24)
- Communication-Social Justice (28)
- Communication-Science, Technology, and Culture (46)/Communication-STAC (18)
- Interaction Design-Social Justice (33)/Interact. Design-Soc. Justice (30)
- Interaction Design-Science, Technology, and Culture (54)/Interaction Design-STAC (23)
- Social Justice-Science, Technology, and Culture (47)/Social Justice-STAC (19)

This curricular change will not in any way affect program leadership, faculty, support staff, space requirements, technological needs, or instructional delivery or format.

| Current and Proposed BSLMC Degree Requirements (comparison) | | | |
|---|------------|---|------------|
| 2012-13 Current Requirements | | Proposed Requirements With Threads | |
| First Year: FALL | Hours | First Year: FALL | Hours |
| ENGL 1101 | 3 | ENGL 1101 | 3 |
| MATH 1501 or MATH 1712 | 4 | MATH 1501 or MATH 1712 | 4 |
| Social Science Elective | 3 | LMC 2800 | 3 |
| HIST 2111/12 or POL 1101 or PUBP 3000 or INTA 120C | 3 | HIST 2111/12 or POL 1101 or PUBP 3000 or INTA 120C | 3 |
| Wellness | 2 | Wellness | 2 |
| Total Semester Hours | 15 | Total Semester Hours | 15 |
| First Year: SPRING | Hours | First Year: SPRING | Hours |
| ENGL 1102 | 3 | ENGL 1102 | 3 |
| MATH 1502 or MATH 1711 | 4 | MATH 1502 or MATH 1711 | 4 |
| Lab Science | 4 | Lab Science | 4 |
| Social Science Elective (International) | 3 | Social Science Elective (International) | 3 |
| Total Semester Hours | 14 | Total Semester Hours | 14 |
| Second Year: FALL | Hours | Second Year: FALL | Hours |
| LCC 2100 Introduction to Science, Technology, & Culture | 3 | LMC Thread A | 3 |
| Science or Computer Science Electives | 4 | Science or Computer Science Electives | 3 |
| Humanities Elective | 3 | Humanities Elective | 3 |
| PST 3115 or PST 3127 | 3 | PHIL 3105, 3115, or PST 3127 | 3 |
| Lab Science | 4 | Lab Science | 4 |
| Total Semester Hours | 17 | Total Semester Hours | 16 |
| Second Year: SPRING | Hours | Second Year: SPRING | Hours |
| LCC Elective (3100 Series) | 3 | LMC 2850 | 3 |
| Modern Language Elective (2000 Level or Higher) | 3 | Modern Language Elective (2000 Level or Higher) | 3 |
| Humanities Elective | 3 | Humanities Elective | 3 |
| | | Free Elective | 2 |
| Science or Computer Science Electives | 4 | Science or Computer Science Electives | 3 |
| Computing Requirement | 3 | Computing Requirement | 3 |
| Total Semester Hours | 16 | Total Semester Hours | 17 |
| Third Year: FALL | Hours | Third Year: FALL | Hours |
| LCC Elective (3100 Series) | 3 | LMC Thread B | 3 |
| LCC Elective (3200 or 3500 Series) | 3 | LMC Thread A | 3 |
| LCC Elective (3400 or 4400 Series) | 3 | LMC Thread B | 3 |
| Free Elective | 3 | Free Elective | 3 |
| Non Major Cluster Elective | 3 | Social Science Elective | 3 |
| Total Semester Hours | 15 | Total Semester Hours | 15 |
| Third Year: SPRING | Hours | Third Year: SPRING | Hours |
| Free Elective | 3 | Free Elective | 3 |
| LCC Elective (3200 or 3500 Series) | 3 | LMC Thread A | 3 |
| LCC Elective (3300 Series) | 3 | LMC Thread B | 3 |
| LCC Elective (3400 or 4400 Series) | 3 | LMC Thread A | 3 |
| Non Major Cluster Elective | 3 | LMC Thread B | 3 |
| Total Semester Hours | 15 | Total Semester Hours | 15 |
| Fourth Year: FALL | Hours | Fourth Year: FALL | Hours |
| LCC Elective (3200 or 3500 Series) | 3 | LMC Thread A | 3 |
| LCC Elective (3300 Series) | 3 | LMC Thread B | 3 |
| LCC Elective (2000 Level or Higher) | 3 | LMC Thread A | 3 |
| Non Major Cluster | 3 | LMC Thread B | 3 |
| Free Elective | 3 | Free Elective | 3 |
| Total Semester Hours | 15 | Total Semester Hours | 15 |
| Fourth Year: SPRING | Hours | Fourth Year: SPRING | Hours |
| LCC Elective (3400 or 4400 Series) | 3 | LMC Thread A | 3 |
| LCC Elective (3300 Series) | 3 | LMC Thread B | 3 |
| LCC Elective (2000 Level or Higher) | 3 | Free Elective | 3 |
| LCC 4100 Seminar in STAC or 4102 Senior Thesis | 3 | Capstone: LMC 41/42/43/44/45/4600 or LMC 4102 | 3 |
| Social Science Elective | 3 | Social Science Elective | 3 |
| Total Semester Hours | 15 | Total Semester Hours | 15 |
| Total Program Hours = 120 Hrs + Wellness (2 Hrs) | 122 | Total Program Hours = 120 Hrs + Wellness (2 Hrs) | 122 |

New Courses

LMC 2800: Introduction to Literature, Media, and Communication 3-0-3

Note: Request for Humanities attribute will be reviewed by the General Education Subcommittee.

LMC 2850: Seminar in Literature, Media, and Communication 3-0-3

Note: Request for Humanities attribute will be reviewed by the General Education Subcommittee.

Note: In the future, we will propose a new course, LMC 3426 Advanced Video Production, as an option in the Media, Communication, and Interaction Design threads. In the spring that course will be offered for a second time as a special topics course.

Changing Subject Codes of Existing Courses to LMC from LCC

This request is for new LMC versions of the existing LCC courses.

We propose to recreate all LCC classes as LMC classes to match our new School name. We are changing nothing but our course codes at this time. This group of courses is comprised of 3000-level classes with the general education (Core Curriculum) attribute (Humanities).

LMC 3102: The Classical Tradition

LMC 3104: Age of Scientific Discovery

LMC 3106: Age of Scientific Revolution

LMC 3108: Science, Technology and Enlightenment

LMC 3110: Science Technology and Romanticism

LMC 3112: Evolution and the Industrial Age

LMC 3114: Science, Technology, and Modernism

LMC 3116: Science, Technology and Postmodernism

LMC 3118: Science, Technology, and American Empire

LMC 3202: Studies in Fiction

LMC 3204: Poetry and Poetics I

LMC 3206: Communication and Culture

LMC 3208: African American Literature and Culture

LMC 3210: Ethnicity in American Culture

LMC 3212: Women, Literature, and Culture

LMC 3214: Science Fiction

LMC 3216: Theater I: Ancient Greek to Medieval Drama

LMC 3218: Theater II: Renaissance and Restoration

LMC 3219: Literature and Medicine

LMC 3220: Theater III—Modern/Contemporary Drama

LMC 3222: Regionalism in American Literature

LMC 3225: Gender Studies in the Disciplines

LMC 3226: Major Authors - changing from non-repeatable to repeatable

(Note: The Committee approved this course changing from non-repeatable to repeatable. This approval was with the intent to not allow the same content to be repeated. Should the Registrar's Office discover a way to monitor these

kinds of repeatable courses for duplicative content, the Committee authorizes the action to implement the technology to do so.)

LMC 3228: Shakespeare

LMC 3234: Creative Writing

LMC 3252: Studies in Film and Television

LMC 3254: Film History

LMC 3256: Major Filmmakers - changing from non-repeatable to repeatable

(Note: The Committee approved this course changing from non-repeatable to repeatable. This approval was with the intent to not allow the same content to be repeated. Should the Registrar's Office discover a way to monitor these kinds of repeatable courses for duplicative content, the Committee authorizes the action to implement the technology to do so.)

LMC 3257: Global Cinema

LMC 3258: Documentary Film

LMC 3259: Experimental Film

LMC 3262: Science, Technology, and Performance

LMC 3302: Science, Technology, and Ideology

LMC 3304: Science, Technology, and Gender

LMC 3306: Science, Technology, and Race

LMC 3308: Environmentalism and Ecocriticism

LMC 3310: The Rhetoric of Scientific Inquiry

LMC 3314: Technologies of Representation

LMC 3316: Postcolonialism

LMC 3318: Biomedicine and Culture

LMC 3352: Film and/as Technology

LMC 3362: Science, Technology and Performance

LMC 3502: Ancient and Medieval Literature and Culture

LMC 3504: Renaissance Literature and Culture

LMC 3506: Enlightenment Literature and Culture

LMC 3508: Formations of American Culture

LMC 3510: American Literature and Culture II

LMC 3512: British and Continental Romanticism

LMC 3514: Victorian Literature and Culture

LMC 3516: Literary and Cultural Modernism

LMC 3518: Literary and Cultural Postmodernism

LMC 3823: Special Topics in Literature and Culture

LMC 3833: Special Topics in Science, Technology and Culture

LMC 3843: Special Topics in Communication

LMC 3853: Special Topics in Film

LMC 3863: Special Topics in Performance

LMC 4204: Poetry and Poetics II

This request is for new LMC versions of the existing LCC courses.

The School of Literature, Media, and Communication is updating its course numbers to correspond to its new name: LMC (not LCC).

We propose to recreate all LCC classes as LMC classes to match our new School name. We are changing nothing but our course codes at this time. This group of courses is comprised of 2000-level classes with the general education (Core Curriculum) attribute (Humanities).

LMC 2100: Introduction to Science, Technology, and Culture

LMC 2200: Introduction to Gender Studies

LMC 2300: Introduction to Biomedicine and Culture

LMC 2400: Introduction to Media Studies

LMC 2500: Introduction to Film

LMC 2600: Introduction to Performance Studies

LMC 2813: Special Topics in STAC

LMC 2823: Special Topics in Literature and Culture

This request is for new LMC versions of the existing LCC courses.

The School of Literature, Media, and Communication is updating its course numbers to correspond to its new name: LMC (not LCC).

LMC 2661: Theatre Production I

LMC 2662: Theatre Production II

LMC 2698: Undergraduate Research

LMC 2699: Undergraduate Research

LMC 2700: Introduction to Computational Media

LMC 2720: Principles of Visual Design

LMC 2730: Construction of the Moving Image

LMC 3402: Graphic and Visual Design

LMC 3403: Technical Communication

LMC 3406: Video Production

LMC 3408: The Rhetoric of Technical Narratives

LMC 3410: Non-linear Documents

LMC 3412: Communicating Science and Technology to the Public

LMC 3414: Intellectual Property: Policy and Law

LMC 3661: Theatre Production III

LMC 3662: Theatre Production IV

LMC 3705: Principles of Information Design

LMC 3710: Principles of Interaction Design

LMC 4100: Seminar in STAC

LMC 4102: Senior Thesis

LMC 4200: Seminar in Literary and Cultural History

LMC 4300: Seminar in Biomedicine and Culture
LMC 4400: Seminar in Media Studies
LMC 4406: Contemporary Issues in Professional Communication
LMC 4500: Seminar in Film Studies
LMC 4600: Seminar in Performance Studies
LMC 4602: Performance Practicum
LMC 4698: Research Assistantship
LMC 4699: Undergraduate Research
LMC 4701: Undergraduate Research Proposal Writing
LMC 4702: Undergraduate Research Thesis Writing
LMC 4720: Interactive Narrative
LMC 4725: Game Design as Cultural Practice
LMC 4730: Experimental Digital Art
LMC 4731: Game AI
LMC 4811: Special Topics
LMC 4812: Special Topics
LMC 4813: Special Topics
LMC 4814: Special Topics
LMC 4815: Special Topics
LMC 4904: Internship

Future Agenda Items

1. The Committee would like to discuss double-dipping of courses for the minor. This may be a concern and could become a greater one as more minors are implemented. **Note: Following the meeting the Registrar's Office reviewed the Guidelines and found that this is addressed: "A course may not be used to fulfill the requirements of more than one minor or certificate." – see #12 at: <http://www.catalog.gatech.edu/academics/minorguide.php>**
2. The Committee requested some research on the definitions of lecture, seminar, and discussion so that the new course proposals where these modes of presentation are used can be discussed in a more informed manner. The Registrar will do the research and bring what she finds back to the Committee.

Administrative Follow-up

1. The Committee requested that some wording on the NCP form be edited and that the grade basis for courses be listed as "preferred" and that it be noted that all grade modes are assumed. If the proposer does not wish to have all three grade modes available, he/she would have to make the case for it. This should eliminate the need to have the grade mode discussion for most future proposals. The revised NCP form is now on the web site.

Adjourned,

Reta Pikowsky
Registrar

Institute Undergraduate Curriculum Committee
Minutes, February 12, 2013
2/16/2013 9:40 AM