

**Institute Undergraduate Curriculum Committee
Revised Minutes
Academic Matters and Appeals (Full Committee)
Tuesday, July 22, 2014**

Present: Hollengreen (ARCH), Klein (ECE), Mayor (ME), Pikowsky (Registrar), Senf (LMC), Wilkinson (CHEM & BIOCHEM), Yaszek (LMC)

Visitors: Laros (Registrar), Merkousko (Registrar), Hodges (Registrar), Raczynski (CS), Boothe (CEE), Millard-Stafford (APPH)

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: Since a quorum was not present at the time the meeting was held, it is important to note that all materials were referred to the whole committee electronically through the Institute Curriculum Committee website in the normal manner. The following decisions were affirmed by a quorum of participants in subsequent electronic balloting.

Note: All votes are unanimous unless specifically noted otherwise.

Academic Matters

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

**Degree Modification -Approved
Bachelor of Science in Chemistry
Traditional and Business Concentrations**

Changes to Program:

- a) Additional Major Requirements: Add CHEM 4695 (UG internship) to list of courses excluded. CHEM 4695 and 4699 are required in another category for the BS CHEM degree
 - a. Traditional track and
 - b. Business track

- b) Technical Electives: Add MATH 2403, Differential Equations, to Technical Electives for the BSICHEM traditional track only. Although not required, this will help some students better prepare for CHEM 3412, Physical Chemistry II (Quantum Mechanics)

**Bachelor of Science in Chemistry 2014 - 2015 Degree Requirements
Traditional Concentration**

REQUIREMENT	REQ HRS	COURSE(S)	
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 1315 or 1371	
Core C - Humanities	6	Any HUM	
Core D - Science, Math, & Technology	4	PHYS 2211	
	4	PHYS 2212	
	4	MATH 1502	
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	CHEM 1211K	
	4	CHEM 1212K	
	2	CHEM 2380	
	4	MATH 2401	
	4	BIOL 1510	
Major Requirements	3	CHEM 2211	
	3	CHEM 2311	
	3	CHEM 2312	
	3	CHEM 3111	
	5	CHEM 3211	
	3	CHEM 3380	
	3	CHEM 3411	
	3	CHEM 3412	
	2	CHEM 3481	
Additional Major Requirements	3	CHEM 4695 or CHEM 4699	
	3	CHEM 3511 or CHEM 4511 or CHEM 4512	
	6	CHEM 4000- or 6000-level	a
	6	3000-level Technical Electives	b
Free Electives	13	Free Electives	
TOTAL:	122		

a = CHEM 4681 and 4699 not allowed.

b = Courses must be 3000-level or higher, and from the Colleges of Computing, Engineering, or Sciences. - Limit 3hrs of CHEM 4699.

a. This proposal will add CHEM 4695 to list not allowed

b. This project proposal is to add MATH 2403 Differential Equations as a Technical Elective (b)

**Bachelor of Science in Chemistry 2014 - 2015 Degree Requirements
Business Concentration**

REQUIREMENT	REQ HRS	COURSE(S)
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 1315 or 1371
Core C - Humanities	6	Any HUM
Core D - Science, Math, & Technology	4	
	4	PHYS 2211
	4	PHYS 2212
Core E - Social Sciences	4	MATH 1502
	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	
	4	CHEM 1211K
	4	CHEM 1212K
	2	CHEM 2380
	4	MATH 2401
Major Requirements	4	BIOL 1510
	3	CHEM 2211
	3	CHEM 2311
	3	CHEM 2312
	3	CHEM 3111
	5	CHEM 3211
	3	CHEM 3380
	3	CHEM 3411
	3	CHEM 3412
	2	CHEM 3481
Additional Major Requirements	3	CHEM 4695 or CHEM 4699
	3	CHEM 3511 or CHEM 4511 or CHEM 4512

	3	CHEM 4000- or 6000-level	a
	3	ACCT 2101 or MGT 3000	
	3	MGT 3101 or MGT 3150 or PSYC 2220 MGT 3062 or MGT 3078 or MGT 3300 or MGT 3660 or MGT 4015 or MGT 4026 or MGT 4028 or MGT 4030 or MGT 4190 or MGT 4191 or MGT 4192 or MGT 4193 or MGT 4194 or MGT 4303 or MGT 4304 or MGT 4307 or MGT 4335 or MGT 4610 or MGT 4670	
Free Electives	10	Free Electives	
TOTAL:	122		

a = CHEM 4681 and 4699 not allowed.

a. This proposal will add CHEM 4695 to list not allowed

2. A motion was made to approve a request from the School of Applied Physiology for a certificate modification and for a new minor. The motion was seconded and approved.

**Certificate Modification – Approved
Certificate in Applied Physiology**

Note: Approved with the additions of APPH 3754 and 3756 as Electives.

Add 2 new courses that are required (APPH 3753 and APPH 3755) in place of a single required course (APPH 3751) that is no longer being taught. There are also new courses available in APPH that we have added to the pick list of electives to select.

For electives, students must select at least one additional APPH course totaling 3 credit hours (9 hours total in APPH). Previously this APPH elective requirement was “two courses for at least 4 hrs.” Optional elective course list outside of APPH has not been altered.

In summary, the 12 hr certificate consists of: 6 hr of required APPH courses, 3 hour elective APPH, and 3 hr elective APPH OR outside APPH (from approved list which has not changed).

**New Minor – Approved
Minor in Physiology**

Note: The Committee wished to point out that this minor can be done in 15 hours if students are advised carefully about how to proceed through the requirements and select courses that would result in the right number of credit hours. Advising will be important for meeting this minor with 15 hours.

The Physiology minor consists of 8 credits of required courses and an additional 7 credits of electives (a minimum of 4 hours within APPH for a total of 12 APPH credit hours).

Required courses (8 credits):

APPH/BIOL 3753 *Fundamentals of Anatomy (3-0-3)*

Prerequisites: BIOL 1520 or 1521 or CHEM 1211 or 1310

APPH 3754 *Human Anatomy Lab (0-3-1)* *Co-requisite or Prerequisite*
APPH/BIOL 3753

APPH/BIOL *Human Physiology 3755 (3-0-3)* *Prerequisite APPH/BIOL*
3753

APPH 3756 *Human Physiology Lab (0-3-1)* *Co-requisite or Prerequisite*
APPH/BIOL 3755

Elective courses (a minimum of 4 APPH credits chosen from the following):

Note: Only a maximum of three credit hours of APPH 490X (undergraduate research) may be applied towards the minor.

APPH 2500- *Introduction to Sport Science (3-0-3)*

No Prerequisite

APPH 3000- *Survey of Medicine (3-0-3)*

Prerequisites: BIOL 1510 or CHEM 1211 or CHEM 1310

APPH 3500 - *Nutrition and Health (2-0-2)*

Prerequisite: APPH 1040/1050

APPH 4100 – [*Exercise Physiology \(2-3-3\)*](#)

Prerequisite: APPH 3751

APPH 4200 – [*Kinesiology \(3-0-3\)*](#)

Prerequisites: BIOL 1510 or 1511 or 1520 or 3751 or APPH 3751; MATH 1113 or 1501 or 1511 or 1502 or 1512.

APPH 4400 – *Human Neuroanatomy (3-0-3)*

No Prerequisite

APPH 4600 – [*Muscle Structure & Plasticity \(3-0-3\)*](#)

Prerequisites: BIOL 1510

APPH 490X - *Undergraduate Research (max. 3 cr.)*

Additional elective courses outside of APPH: (3 credits maximum):

Appendix A provides the catalog description of these courses:

BIOL 3450 – *Cell Molecular Biology (3-0-3)*

Prerequisites: BIOL 1510 or BIOL 1511 and CHEM 2311.

BIOL 3451 – *Cell Molecular Biology Lab (1-0-3)*

Prerequisites: BIOL 1510 or BIOL 1511 and CHEM 2311.

BIOL 4446 – *Animal Physiology I (3-0-3)*

Prerequisites: BIOL 3340.

BIOL 4464 – *Developmental Biology (3-0-3)*

Prerequisites: BIOL 2344 or 2345 and 3340.

BMED 3100 – *Systems Physiology (3-0-3)*

Prerequisites: CHEM 1315 or CHEM 2311.

ECE 4781 - Biomedical Instrumentation (3-0-3)
Prerequisites: ECE 3040 or ECE 3710.

LCC 3318 – Biomedicine and Culture (3-0-3)
Prerequisites: ENGL 1102.

ME 4757 - Biofluid Mechanics (3-0-3)
Prerequisites: AE 2020 or ME 3340 or BMED 3300.

ME 4758 - Biosolid Mechanics (3-0-3)
Prerequisites: ME 3201 or BMED 3400.

PSYC 2230 - Abnormal Psychology (3-0-3)
Prerequisite: PSYC 1101.

PSYC 3020 - Biopsychology (3-0-3)
Prerequisites: PSYC 1101, and BIOL 1520.

PSYC 4100 - Behavioral Pharmacology (3-0-3)
Prerequisites: PSYC 1101, BIOL 1520, and CHEM 1310.

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

3. A motion was made to acknowledge a request from the School of Civil and Environmental Engineering for prerequisite modifications. The motion was acknowledged without concern.

Prerequisite Modifications - Acknowledged without concern

CEE 4300: Environmental Engineering Systems
 Current prereq: None (formerly was CEE 2300)
 New prereq: (CHEM 1310 or CHEM 1211k or CHEM 12X1) and (PHYS 2211 or PHYS 2231) and (MATH 1502 or MATH 1512 or MATH 15X2)

CEE 4310: Water Quality Engineering
 Current prereq: CEE 4300
 New prereq: CEE 2300 and (CEE 3040 or ME 3340)

CEE 4320: Hazardous Substance Engineering
 Current prereq: CEE 4300 and CEE 3040
 New prereq: CEE 2300 and (CEE 3040 or ME 3340)

CEE 4395: Environmental Systems Design
 Current prereq: CEE 4300
 New prereq: CEE 2300 and (CEE 3040 or ME 3340) and (CEE 4300 or CEE 4310 or CEE 4320)

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

Degree Modification – Approved
Bachelor of Science in Environmental Engineering

- Remove CEE 4300 from BSENVE as a required course.
 - Note: The pre-requisites for CEE 4300 were added to the list of courses for which CEE 4300 was itself a pre-requisite.
- Add CEE 4300 to approved Technical Elective Focus and increase credit hours from 12 to 15.

This provides ENVE students with more options towards their Technical Elective Focus. Total hours for the degree remain the same at 129.

Bachelor of Science in Environmental Engineering

<u>REQUIREMENT</u>	<u>REQ HRS</u>	<u>COURSE(S)</u>
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 1371
Core C - Humanities	6	Any HUM
Core D - Science, Math, & Technology		PHYS 2211
	4	PHYS 2212
	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 or ECON 2101 or ECON 2105 or ECON 2106
	6	Any SS
Core F - Courses Related to Major		COE 2001
	2	
	4	MATH 2401
	4	MATH 2403
	4	CHEM 1310
	4	BIOL 1510
--	Ethics Requirement	
Major Requirements	2	CEE 2040
	3	CEE 2300
	3	CEE 3000
	3	CEE 3020
	3	CEE 3040
	3	CEE 3340
	3	CEE 3770 or ISYE 3770

	3	CEE 4090
	3	CEE 4200
	3	CEE 4300
	3	COE 3001
Additional Requirements	3	CHEM 1315
	4	EAS 2600
	3	CHBE 2110 or CHEM 3411 or EAS 3603 or ME 3322
Environmental Engineering Technical Elective	3	CEE 4210 or CEE 4405 or CEE 4620 or CEE 4795
Design Elective	3	CEE 4310 or CEE 4320 or CEE 4330 or CEE 4395
Technical Elective Focus	12 15	Technical Electives
Approved Electives	6	Approved Electives

TOTAL: 129

*Technical Electives:: BIOL 2335 or BIOL 3380 or BIOL 4010 or BIOL 4430 or BMED 3400 or BMED 4757 or BMED 4758 or CEE 3010 or CEE 4100 or CEE 4210 or CEE 4225 or CEE 4230 or **CEE 4300** or CEE 4310 or CEE 4320 or CEE 4330 or CEE 4405 or CEE 4420 or CEE 4600 or CEE 4620 or CEE 4795 or CHBE 3200 or CHEM 3281 or CHEM 3511 or CHEM 4740 or CP 4210 or CP 4510 or EAS 4110 or EAS 4300 or EAS 4410 or EAS 4420 or EAS 4430 or EAS 4480 or EAS 4610 or EAS 4625 or EAS 4740 or ECE 3710 or ECE 3741 or ME 4171 or ME 4172 or ME 4782. Maximum of 3 hrs CEE 4699 and CEE 4900.*

5. A motion was made to approve a request from the College of Computing for prerequisite modifications. The motion was acknowledged without concern.

Prerequisite Modifications - Acknowledged without concern

		CURRENT PRE-REQ	NEW PRE-REQ
CX	4010	CS 1371	"C" or higher (CS 1301 or CS 1371)
CX	4140	CS 1332 or CS 1372 or CS 2110	"C" or higher (CS 1331 or CS 1372 or CS 2316 or CX 4010 or ECE 2035 or ECE 2036)
CX	4220	CS 1332 or CS 1372 or CS 2110	"C" or higher (CS 1331 or CS 1372 or CS 2316 or CX 4010 or ECE 2035 or ECE 2036)
CX	4230	MATH 3215 or MATH 3770 or CS 1332 or CS 1372	(MATH 3215/3225 or MATH 3670 or MATH/ISYE/CEE 3770 or ISYE 2028 or BMED 2400 or ECE 3077) and "C" or higher (CS 1331 or CS 1372 or CS 2316 or CX 4010 or ECE 2035 or ECE 2036)
CX	4232	CS 1332 or CS 1372	"C" or higher (CS 1331 or CS 1372 or CS 2316 or CX 4010 or ECE 2035 or ECE 2036)
CX	4236	CS 1332 or CS 1372 or CS 2110	"C" or higher (CS 1331 or CS 1372 or CS 2316 or CX 4010 or ECE 2035 or ECE 2036)

CX	4240	CS 1371	"C" or higher (CS 1301 or CS 1371)
CX	4242	MATH 2605 or MATH 3215	MATH/ISYE/CEE 3770 or ISYE 2028 or BMED 2400 or ECE 3770) and "C" or higher (CS 1331 or CS 1372 or CS 2316 or CX 4010 or ECE 2035 or ECE 2036 or CX 4240)
CX	4640	MATH 2403 or 2413 or 24X3 or 2602	"C" or higher (MATH 2403 or MATH 2413 or MATH 24X3 or MATH 2602)
CX	4641	CX 4640 or MATH 4640	"C" or higher (CX 4640 or MATH 4640)
CX	4777	MATH 2605	MATH 2605 or MATH 2401 or MATH 24X1 or MATH 2411

Justification for the changes:

- To add grade “C” or better in CS and Thread courses (since this is a requirement for CS majors).
- To adjust prerequisites to match the prerequisites for the old CS courses.
- To add CX 4010 (a new course) as acceptable prereq where more programming experience is needed.
- For courses that required CS 1371, also accept CS 1301.
- To simplify and unify the prerequisites across CX 4xxx courses
- To cover all computing and prob/stat options for the various majors under the CX Minor

Prerequisite Modifications - Acknowledged without concern
Modify prerequisites for CS 3311 and CS 3312

When creating the new course proposals for both CS 3311 and 3312, the prerequisites were listed on the wrong line on the New Course Proposal form. We would like to change the New Course Proposals to add the prerequisites of CS 2340 with a grade of “C” or higher and remove the “prerequisites with concurrency” that is listed.

CS 3311: Project Design

Prerequisites: CS 2340 with a grade of “C” or higher

Prerequisites with concurrency: n/a

Corequisites: LMC 3432

CS 3312: Project Implementation

Prerequisites: CS 2340 with a grade of “C” or higher and LMC 3432 with a grade of “C” or higher

Prerequisites with concurrency: n/a

Corequisites: LMC 3431

6. A motion was made to approve a request from the College of Computing for a certificate deactivation and degree modification. The motion was seconded and approved.

**Deactivate a Certificate – Approved
Certificate in Software Engineering**

We are no longer offering CS 2335-Software Practicum which is required for the certificate program. The class hasn't been offered since Spring 2010. We do not have any students currently enrolled in the software engineering certificate program.

**Degree Modification - Approved
Bachelor of Science in Computer Science
(Intelligence & Systems Arch concentration)**

Note: The Committee noted that there has been significant and ongoing modification to the BSCS since the Threads curriculum was implemented. There is some concern that the frequent changes reflect difficulty in administering a complex curriculum, with possible negative implications for students. The IUCC recommends to the College of Computing that it consider this issue as it looks to the next academic year.

We are requesting adding CS 3240 back as a course option with CS 4510 on the Intelligence and Systems Architecture concentration. This class was mistakenly removed because Systems and Architecture was no longer teaching CS 3240 but it is still a course option for the Intelligence thread. Since we will be teaching CS 3240, the course needs to be added back. Students can either choose taking CS 3240 OR CS 4510.

**Bachelor of Science in Computer Science
Intelligence & Systems and Architecture**

REQUIREMENT	REQ HRS	COURSE(S)
Wellness	2	APPH 1040 or APPH 1050
Core A - Essential Skills	3	ENGL 1101
	3	ENGL 1102
	4	MATH 1501
	3	CS 1301
Core B - Institutional Options	6	Any HUM
Core D - Science, Math, & Technology	4	PHYS 2211
	4	Lab Science
	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
	6	Any SS
Core F - Courses Related to Major	4	Lab Science
	1	CS 1100
	3	CS 1331
	3	CS 1332
	3	CS 2050 or CS 2051
Major Requirements	4	MATH 2605
	3	CS 2340
	3	CS 4001 or CS 4002
	1	CS 3311 or CS 4980
	2	LMC 3432
	2	CS 3312 or CS 4980
Concentration	1	LMC 3431
	4	CS 2110
	4	CS 2200
	3	CS 3210
	3	CS 3510 or CS 3511
	3	CS 3600
	3	CS 3630 or CS 3790 or PSYC 3040
	6	CS 4495 or CS 4635 or CS 4641 or CS 4731 or CS 4650 or CS 4649
	3	CS 3240 or CS 4510
	3	CS 3220
	3	CS 3300 or CS 4240
Other Required Courses	3	CS 4220 or CS 4290 or CS 4210
	3	MATH 3012
	3	MATH 3215 or MATH 3670 or CEE 3770 or ISYE 3770 or (ISYE 2027 and ISYE 2028)
Free Electives	7	Free Electives
TOTAL:	126	

Student Petitions

1. A motion was made to approve an appeal to selectively withdraw from a course after the deadline had passed. The motion was seconded and approved.
2. A motion was made to approve an appeal for a term withdrawal after the deadline had passed. The motion was seconded and approved.
3. A motion was made to approve an appeal for a term withdrawal after the deadline had passed. The motion was seconded and approved.

4. A motion was made to table an appeal for a request for a waiver of the 36-hour rule. The motion was seconded and approved. The Registrar will follow up on the questions raised.

Adjourned,

Reta Pikowsky
Registrar