Institute Undergraduate Curriculum Committee
Appeals and Academic Matters (Full Committee)
Tuesday, August 16, 2011

Present: Riley (ECE), Pikowsky (REG), Paredis (ME), Seitzman (AE), Castro-Lacouture (ARCH), Ferri (ME), Senf (LCC), Bottomley (CHEM), Isbell (CoC), Loss (MATH), Montoya (BIOL)

Visitors: Laros (REG), Howson (REG), Goodisman (BIOL), Paraksa (Provost), Corso (PSYC), Green (BIOL), Bowman (INTA)

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 Biology for new courses. The motion was seconded and approved.

NEW COURSES:
BIOL 4697: Biology Undergraduate Teaching Experience 1-6-3 Letter Grade only
BIOL 4696: Biology Undergraduate Teaching Assistantship 1-6-3 Audit only

Note: The vote on this motion was not unanimous. Questions were raised about the amount of academic content in the courses. The School of Biology intends to allow them as technical electives in their program and feels that the content is appropriate for this use. It was also noted that other units have similar courses in place. The larger concern is about the amount of academic content in courses such as these and it is likely that this will continue to be a topic of discussion for the Committee.

2. A motion was made to approve a request from the College of Computing for the addition of an equivalency to two existing courses. The motion was seconded and approved. This request will also be added to the upcoming GCC Agenda for approval.

The Computational Journalism undergraduate (CS4464) and graduate (CS6465) courses should be considered as equivalent selections. This request is necessary because it was not noted as equivalent on either the undergraduate or graduate new course proposal forms (NCP) submitted in 2008.
3. A motion was made to approve a request from the School of International Affairs for new courses. The motion was seconded and approved.

**NEW COURSES:**
- INTA 4014: Scenario Writing and Pathgaming 3-0-3
- INTA 4016: Strategy and Arms Control 3-0-3
- INTA 4742: Modeling, Simulation and Military Gaming 3-0-3

Note: The Committee recommended that the request be moved forward without the Core Curriculum attributes. There is now a multi-step process for approving courses to be included in the Core and it was preferable to move these courses without the attributes and to request them at a later time. The NCPs will be corrected.

4. A motion was made to acknowledge request from the School of Materials Science and Engineering for addition of a course to the optional courses on two concentration elective lists. No concerns were expressed.

Bachelor of Science in Materials Science and Engineering
Concentration: Structural & Functional Materials
Concentration: Biomaterials

**COURSE ADDED TO CONCENTRATION LIST**
MSE 4004: Materials in Electronic Applications

This does not affect the Polymer & Fiber Materials Concentration.

5. A motion was made to approve a request from the School of Psychology for two new degrees. The motion was seconded and approved.

**NEW DEGREE:**
Bachelor of Science in Applied Psychological Science

The curriculum is practically oriented with a strong emphasis on scientific, technical, and quantitative approaches to the understanding and application of human behavior. The undergraduate curriculum is based on a strong emphasis in the sciences and mathematics and provides an excellent preparation for graduate school in Human Factors-Engineering Psychology, Industrial-Organizational Psychology, business school, law school, and other professional and academic graduate programs. In addition, many students with the BS degree in Applied Psychological Science choose to enter a variety of fields, including: business management, computer software design, human factors, human resources, marketing, personnel selection, system design, training, and usability.

**Humanities – 12 hrs:**

<table>
<thead>
<tr>
<th>Course</th>
<th>Credits</th>
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<tbody>
<tr>
<td>English I</td>
<td>(3hrs)</td>
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<td>English II</td>
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Social Science – 12 hrs:
- History (3hrs)
- Psyc 1101 General Psyc (3hrs)
- Psyc 2015 Research Methods (3hrs)
- Non Psyc Social Science (3hrs)

Mathematics – 11 hrs:
- Math 1501 (4hrs)
- Math 1502 (4hrs)
- ISYE 2027 (3hrs)

Sciences – 16 hrs:
- Bio 1510 or 1511 (4hrs)
- Bio 1520 or 1521 (4hrs)
- And either:
  - Chem I 1211K (4hrs)
  - Chem II 1212K (4hrs)
  - OR
  - Physics 2211 (4hrs)
  - Psysics 2212 (4hrs)
  - OR
  - CHEM 1211K (4hrs)
  - Phys 2211 (4hrs)

Computer Science -3 hrs:
- CS 1301 or CS 1315 or CS 1371

Major Required Course work -31 hrs:
- PSYC 2020 - Psychological Statistics (with lab) (4hrs)
- PSYC 2220 - Industrial/Organizational Psychology (3hrs)
- PSYC 2270 - Engineering Psychology (3hrs)
- PSYC 2210 - Social Psychology (3hrs)
- PSYC 3011 - Cognitive Psychology w/Lab (4hrs)
- Psyc 3031 – Experimental Analysis of Behavior (4hrs)
- PSYC 3750 - Human-Computer Interface
  - Design & Evaluation (cross listed with CS) (3hrs)
- PSYC 4010 - Human Abilities —OR— PSYC 4270 – Testing (3hrs)

Capstone:
- PSYC 4031 - Applied Experimental Psychology (4hrs)
- OR
- PSYC 4601A - Senior Thesis II** (4hrs)

**The "A" distinction added to PSYC 4601 to indicate that, if used to fulfill one's capstone requirement, the final product must have an applied component to it.
Applied Psychological Science Electives (12hrs) (Four must be taken - 12 hours, one of which must be a 4000-level course, Max of 3 hrs for Special Problems):

- PSYC 2103 - Human Development
- PSYC 2250 - Cross-Cultural Psychology
- PSYC 2300 - Psychology of Advertising
- Psyc 4031 – Applied Experimental Psychology
  *If not taken as a required course
- PSYC 4100 - Behavioral Pharmacology
- PSYC 4260 - Psychology of Aging
- PSYC 4270 - Psychological Testing — OR — PSYC 4010 - Human Abilities
  *Whichever course is not taken as a required course can be taken as an applied elective
- PSYC 4600 - Senior Thesis I (Not counted as a 4XXX level course)
- PSYC 4770 - Psychology and Environmental Design
- PSYC 4801-4 - Special Topics (permission of instructor and junior/senior standing) (Only 3 hours may be applied toward the Applied Psychology Elective.)
- PSYC 4900-10 - Special Problems (credit hours arranged) (permission of instructor and junior/senior standing) (Not counted as a 4XXX level course)

Management/Engineering/Industrial Design electives (9hrs):

2 management (6hrs) and 1 Engineering/Industrial Design courses (3hrs)
  -OR-
1 management (3 hrs) and 2 Engineering/Industrial Design courses (6hrs)

From the following list of courses (MOST HAVE PREREQUISITES):

Engineering Electives:
* ME/CEE 1770 Introduction to Engineering Graphics and Visualization
* CEE 4600 – Transportation Plan & Design
* CEE 4640 – Freeway and Interchange Planning and Design
  ECE – 2025 Introduction to Signal Processing
  ECE any course at or above 2030
  NRE - 4430 Nuclear Regulatory Requirements
  ISYE – Any course at or above 3000

ME/CEE 1770 is pre-requisite for CEE 4600; CEE 4600 is pre-requisite for CEE 4640.

*Class capacity and restrictions to consider per email from D. Webster (CE) and K. Mehaffey (ME). The IUCC was made aware of these course capacity and restrictions.

Industrial Design electives:
  ID 3103 – Industrial Design Computing I
ID 2011 – Intro to Design I
ID 2012 – Intro to Design II
ID 3011- Intermediate Design I
ID 3012 Intermediate Design II
ID 4011 Advanced Design I
ID 4011 Advanced Design II

Management electives:
Mgt – 2106 Legal Aspects - Business
Any course numbered 3000 or greater

Free Electives - 14 hrs
Research Methods carry over 1 hr
Other courses

Health Requirement – 2hrs
HPS 1040

Total Credit hours for the degree – 122 credit hours

NEW DEGREE:
Bachelor of Science in Cognitive Neuroscience

The benefits and value of the proposed program is that it will increase the visibility of the School of Psychology and, in general, Georgia Tech within the general population. Additionally, the proposed program will be one of the first, if not the first, undergraduate Cognitive Neuroscience programs in the nation. The proposed program’s fit within GT’s strategic plan is two-fold. First, it will enrich the undergraduate education by providing additional choices to undergraduate students seeking to understand the relation between cognitive processes and the nervous system. Second, the program pushes the frontier of undergraduate programs especially in psychology.

Curriculum:

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**Sciences – 16 hrs:**
- Bio 1510 or 1511  (4hrs)
- Bio 1520 or 1521  (4hrs)
- Chem I 1211K  (4hrs)
- Chem II 1212K  (4hrs)

**Computer Science -3 hrs:**
- CS 1371 MATLAB  (3hrs)

**Major Required Course work -35 hrs:**
- Psyc 2020 - Psychological Statistics (with lab)  (4hrs)
- Psyc 3011 - Cognitive Psychology  (4hrs)
- Psyc 3020 – Biopsyc – OR - Bio/BME - 4752 – Intro to Neuroscience (3hrs)
- Psyc 3041 – Sensation & Perception  (4hrs)
- Psyc 6042 – Neuroimaging  (3hrs)
- Bio/APPH -3751 Anatomy & Physiology  (3hrs)
- Bio - 3340 - Cell Biology + 3341 (lab)  (4hrs)
- Psyc 4090 - Cognitive Neuroscience  (3hrs)

**Capstone:**
- Psyc 4600CNS - Senior Thesis I  (3hrs)
- Psyc 4601CNS - Senior Thesis II  (4hrs)

**Major Electives – 12 hrs (may only use 3 hrs of research or other research hours):**
- Psyc 3031 - Experimental Analysis of Behavior  (4hrs)
- Psyc 4100 – Behavioral Pharmacology  (3hrs)
- Psyc 4200 – Advanced Topics in Cognitive Psychology  (3hrs)

- BMED 3100 – System Physiology  (3hrs)
- BMED 4400 – Neuro engineering Fundamentals  (3hrs)
- Chem 3511 – Survey of Biochemistry  (3hrs)
- Psyc 2698/2699 Undergraduate research  (3hrs) (Max 3hrs)
- Psyc 4698/4699 Undergraduate research  (3hrs) (Max 3hrs)
- Psyc Special Topics  (3hrs) (new course)
- Psyc Advanced Topics in CNS  (3hrs) (new course)

**Free Electives - 19 hrs:**
- Research Methods (1hr) – carry over from Social Science Credits

**Health Requirement –HPS 1040 2hrs:**

**Total Credit hours for the degree – 122 credit hours**
6. A motion was made to approve the revised list of courses approved for the Global Perspectives overlay area in the new core curriculum. This list was submitted to the USG Council on General Education and approved in July 2011. The motion was seconded and approved.

The newly adopted USG Core Curriculum Policy must be implemented by Fall 2011 by all four-year institutions and by Fall 2012 by all two-year institutions. In addition to approval of at least one learning outcome for each goal by the Council on General Education, each institution must by that date meet the “overlay requirements” for US Perspectives, Global Perspectives and Critical Thinking by designating one or more courses in Areas A-E as US courses; designating one or more course in Areas A-E as GL courses; and designating one of more courses in Areas A-E as CT courses (or, alternatively, by adopting a CT plan). See:

http://www.usg.edu/academic_programs/cpr/implementing_the_new_core_curriculum/

Learning Goal II Global Perspectives

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
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<tbody>
<tr>
<td>ARBC 2301</td>
<td>Arts Sci Tech Hist</td>
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<tr>
<td>ARCH 2112</td>
<td>Hist of Architecture II</td>
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<td>COA 2242</td>
<td>History of Art II</td>
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<tr>
<td>ECON 2101</td>
<td>The Global Economy</td>
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<td>ECON 4311</td>
<td>Global Enterprise</td>
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<td>ECON 4350</td>
<td>International Economics</td>
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<td>ECON 4355</td>
<td>Global Financial Economics</td>
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<tr>
<td>ECON 4411</td>
<td>Economic Development</td>
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<td>HTS 1031</td>
<td>Europe since Renaissance</td>
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<td>HTS 2036</td>
<td>Revolutionary Europe</td>
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<td>HTS 2037</td>
<td>20th Century Europe</td>
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<td>HTS 2041</td>
<td>Hist-Modern Middle East</td>
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<tr>
<td>HTS 2062</td>
<td>Asia in the Modern World</td>
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<td>HTS 2082</td>
<td>Tech &amp; Sci-Industrial Age</td>
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<td>HTS 2100</td>
<td>Science, Technology &amp; Modern World</td>
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<td>HTS 3012</td>
<td>Urban Sociology</td>
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<td>HTS 3032</td>
<td>European Intellectual History</td>
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<td>HTS 3051</td>
<td>Women &amp; Gender-Middle East</td>
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<tr>
<td>HTS 3064</td>
<td>Soc. of Development</td>
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<td>HTS 3065</td>
<td>History Global Societies</td>
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<tr>
<td>HTS 3087</td>
<td>History of Medicine</td>
</tr>
<tr>
<td>INTA 1110</td>
<td>Intro to Intl Relations</td>
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<tr>
<td>INTA 2040</td>
<td>Sci, Tech &amp; Intl Affairs</td>
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<tr>
<td>INTA 2100</td>
<td>Great Power Relations</td>
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<tr>
<td>INTA 2220</td>
<td>Govt &amp; Pol-Western Europe</td>
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<tr>
<td>INTA 2230</td>
<td>Govt &amp; Politics of Asia</td>
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<td>INTA 3101</td>
<td>International Institutions</td>
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<td>INTA 3203</td>
<td>Comparative Politics</td>
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<tr>
<td>INTA 3240</td>
<td>Gov't &amp; Politics-Africa</td>
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<td>INTA 3241</td>
<td>Latin Am Politics</td>
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<td>Int'l Political Econ</td>
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<tr>
<td>INTA 3303</td>
<td>Pol Econ-Development</td>
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<tr>
<td>INTA 3304</td>
<td>Intl Trade &amp; Production</td>
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</table>
7. A motion was made to deny a written appeal of a petition for a Fall 2010 term withdrawal. The motion was seconded and approved.

Adjourned,

Reta Pikowsky
Registrar