Florida Institute of Technology  
Undergraduate Curriculum Committee  
October 30, 2015  
8:00 a.m.  
F.W. Olin Physical Sciences Building  
Second-Floor Conference Room

MINUTES

The meeting began at 8:00 a.m.

The Chair welcomed the Committee.

The following items remained on the Consent Agenda and were unanimously approved.

Consent Agenda:

College of Engineering
1. Department of Biomedical Engineering
   b. CGR – B.S. Biomedical Engineering

College of Psychology and Liberal Arts
2. School of Arts and Communication
   a. ANC – COM 3225 – Reporting, Interviewing and Data Analysis
   b. CGR – B.S. Communication
   c. CGR – B.S. Communication-Military Science Option
   d. CGR – Minor in Communication
   e. ANC – COM 4225 – Online Reporting
   f. ANC – COM 4301 – Media Production-Audio
   g. ANC – COM 4302 – Media Production-Video
   h. ANC – COM 4425 – Mass Communication Law and Ethics

3. School of Psychology
   a. ANC – PSY 3520 – Memory
   d. CRC – BEH 4025 – Applied Behavior Analysis and Autism Interventions

Consent Agenda Discussion Items:

The following item was discussed and approved on a vote of 14-1-1.

College of Engineering
1. Department of Biomedical Engineering
   a. ANC – BME 3030 – Biofluid Mechanics

There was a concern that the course syllabus included topics on the Navier-Stokes and Euler equations, which are systems of partial differential equations, yet the course does not include a pre- or co-requisite of MTH 3210 (Introduction to PDEs and Applications), only a co-requisite of MTH 2201 (Differential Equations). It was explained that in this and other fluid mechanics courses (e.g. MAE 3161 – Fluid Mechanics, OCE 3030 – Fluid Mechanics, etc.) that the differential forms of the conservation equations are not introduced until late in the semester, and even when they are, their use is limited to very simplified problems where the ultimate solution of the final equation becomes all but trivial. It is not until students take more advanced courses (particularly graduate-level courses) that they are solving these particular PDEs using techniques that they would learn in MTH 3210 or other PDE math courses. There was also the concern that students were completing some degree programs that included PDE topics (such as with the fluid mechanics courses) without having MTH 3210 anywhere in the degree program. This is a much broader discussion that the Committee did not take up as it would pertain to each individual and relevant degree program.
The following item was approved as part of the Consent Agenda, but was amended prior to the meeting.

**College of Psychology and Liberal Arts**

3. School of Psychology
   b. ANC – PSY 4522 – Comparative Animal Cognition

It was discovered prior to the meeting that PSY 2512 (Psychology Research Methods and Statistics 1) and PSY 3012 (Research Methods in Applied Psychology) are prerequisites into PSY 3421 (Psychology of Learning and Motivation), and PSY 2512 is an “or” prerequisite into PSY 4521 (Animal Learning and Behavior), thus making PSY 2512 and PSY 3012 redundant restrictions. As such, they were removed from the PSY 4522 course restrictions.

The following item was discussed.

**College of Psychology and Liberal Arts**

3. School of Psychology
   c. CRC – PSY 2512 – Research Methods and Statistics 1

The requested restriction change (removal of CSE 1301) had already been approved in the April 2015 UGCC meeting, effective for Fall 2016, and was thus redundant. It was also explained by the Registrar’s Office that the request to show all the possible required math requirements will be enacted with the next addition of the University Catalog, without additional approval from the Committee. This left the request to add the “CL” designation to the course.

The Committee had previously discussed whether to recommend that the “CL” designation be made obsolete, and the present request provided the opportunity to again discuss the matter. It was learned thatFY 1000 (University Experience) was generally handling the general education requirement of SACS and that the “CL” requirement was also being assessed in that course, and thus most students were satisfying the computer literacy requirement since FYE 1000 is a required course for all freshmen. Other University committees have also been discussing the “CL” requirement as part of a broader discussion on the University’s core general education requirements. And it was explained that while most students will meet the requirement through FYE 1000, it was not clear whether some transfer students might “slip through the cracks.” While it is assumed that all transfer students coming to Florida Tech with an Associate degree meet this requirement, not all transfer students have such a degree. The Committee decided it would be best to consult with Dr. Baloga (VP for Institutional Effectiveness and International Programs) before making any recommendations regarding the “CL” course designation.

The School of Psychology’s request to add the “CL” designation to PSY 2512 was unanimously approved.

The following item was discussed and unanimously approved, as amended.

**College of Science**

4. Department of Biological Sciences
   a. ANM – Option for B.S. Biological Sciences – Biomedical Science

It was noted that the ANM form now had all the signatures needed before the Committee could consider the request. Also, a few minor corrections were made. The ANM form incorrectly listed Dr. Eric Guisbert as the program’s advisor, when it should have been Dr. Julia Grimwade. The form was amended accordingly. Also, BIO 1200 (Introduction to Health Professions) was inadvertently left on the proposed flowchart, which, when removed, reduced the program’s total required credits to 128 (as it should be). Finally, proper course numbers were given to the two BIO 3xxx courses: BIO 3201 and BIO 3202.
A question was raised as to whether a full business plan for this program had been reviewed by the administration. In response, it was explained that this program was essentially a renaming of the Premedical Biology option, with a few tweaked courses, and it wasn’t felt that a full business plan was necessary.

Discussion Items:
1. Calculus & Physics curriculum order (Dr. Maul)

Dr. Maul (Department of Marine and Environmental Systems) noted that for those programs on campus that require both MTH 1002 (Calculus 2) and PHY 1001 (Physics 1), that about half require students to take MTH 1002 at the same time as PHY 1001, and the other half have the students take these courses in sequence, and he asked if there was any evidence to suggest that one way was better than the other. During the discussion, the consensus was that there really wasn’t any hard data on which to base an answer, though students probably have at least a small advantage if they take MTH 1002 prior to enrolling in PHY 1001. One idea was to ask Institutional Research whether they could go back through the grade data in BANNER and extract information on this topic. Dr. Maul volunteered to look into it. It was also suggested that several of the programs put MTH 1002 and PHY 1001 together for scheduling reasons, to help ensure their students graduate in four years.

The question was raised as to how much math background is really needed to take PHY 1001, to which the response was that it was absolutely necessary that MTH 1001 (Calculus 1) be a prerequisite, and that MTH 1002 be at least a co-requisite.

As another point of interest, it was explained that at a recent meeting of the Academic Affairs Committee, Mr. Micus (Registrar) presented data related to the number of pre- and co-requisite waivers that were being issued, and some of that data suggested that, at least amongst the students who were receiving waivers for PHY 1001, a very high percentage of them were receiving good grades. It was not clear whether this was due to the necessity of the prerequisite, or to the quality of advising when it comes to determining whether a waiver is appropriate for a particular student. As a side note, it was also explained that going through this data on pre- and co-requisite waivers, and acting on this data at the academic unit level, has been a good exercise and that better justifications are accompanying waivers than had been the case in the past, and that there are fewer waivers being approved.

On a separate topic, it was asked what progress had been made on the Committee’s discussion about including the liberal arts designation, “LA,” on courses in the catalog, particularly as it related to the Psychology courses since the School of Psychology indicated that perhaps not all their courses should be so designated. In response, it was explained that the undergraduate Psychology faculty formed a subcommittee during a recent meeting, and that they are reviewing their courses.

The Chair noted the next meeting date and reminded everyone that the next meeting would serve as the deadline for implementing any curricula changes into the Fall 2016 University Catalog.

Our next regular meeting is Fri., Nov. 20 at 8:00 a.m. in the Physical Sciences conference room. Agenda items are due Fri., Nov. 13.
Note that the next meeting is the deadline for changes to the 2016-2017 academic year catalog. Curricula changes approved after the next meeting will become effective in Fall 2017.

The meeting ended at 9:48 a.m.

Respectfully submitted,

Mark Archambault – Chair