The meeting began at 8:00 a.m.

The Chair welcomed the members of the Committee.

Prior to handling the Consent Agenda below, it was mentioned that a number of complaints had been heard from students regarding faculty arriving to class late. It was recommended that members remind the faculty in their respective departments that students pay for a full-course experience, and that it is not appropriate for faculty to be consistently late to class.

Consent Agenda:

The following items remained on the Consent Agenda and passed unanimously.

1. Department of Psychology – Changing Restrictions or Credits in a Course
   a. PSY 3522 (Human Cognition)
   b. PSY 3524 (Sensation & Perception)

2. Department of Electrical and Computer Engineering – Changing Restrictions or Credits in a Course – ECE 3222 (Signals and Systems)

Note: Prior to the meeting, Dr. Shoaff (Dept. of Computer Sciences) had requested Item 1 be removed from the Consent Agenda for discussion. However, Dr. Shoaff was not present at the meeting, and because no other member requested its removal, the item was voted on. Dr. Bahr (Dept. of Psychology) did mention that she responded to Dr. Shoaff’s email and explained that the proposed changes would not prevent Computer Sciences students from continuing to take PSY 3522 and PSY 3524.

Discussion:

1. Dept. of Biological Sciences Freshman Courses (Dr. Carroll)
   This discussion item was withdrawn from the Agenda by Dr. Carroll.

2. Biomedical Engineering Program (Dr. Archambault)
   Dr. Archambault noted that the courses in the new Biomedical Engineering program that were designated as part of the QEP had received QEPIC approval the day before the meeting, and asked if there were any objection to proceeding to a vote on the new program and related courses after discussion considering that all the documentation had been made available to the Committee. No objection was made.

   Dr. Kunal Mitra (Dept. of Mechanical and Aerospace Engineering) was present to address questions and concerns regarding the new program. As an initial matter, it was requested that additional prerequisites be placed upon some of the new courses,
though these would not affect the plan for those students in the program itself. In particular, it was requested that BIO 1020 (Biological Discovery 2) be made a prerequisite to BME 3081 (Biomechanics) and that BIO 1010 (Biological Discovery 1) be made a prerequisite to BME 3240 (Computational Methods to Biological Systems). No objection was made to these changes. Furthermore, it was requested that BIO 1010 and BIO 1020 be made prerequisites to BME 4241 (Transport in Biological Systems). The concern was that the course name and description suggested that biological topics would be discussed, and that students who have had no biology background would be at a disadvantage in this course. An objection was raised that this course was also intended to be used as a technical elective for Mechanical Engineering and Chemical Engineering students, students who are not required to take a biology course, and that such a change may prevent that. In the end, it was agreed that a prerequisite of BIO 1010 or BIO 1020 would be added.

Finally, it was requested that BIO 3210 (Mammalian Physiology) be a prerequisite for BME 4251 (Biomedical Measurements and Instrumentation). There was no objection. As a side note, it was asked why BIO 3210 was named “Mammalian Physiology” when it appears that many medical schools look for courses focused on human physiology. In response, it was noted that this was just historically the way it was set up, but that it is an issue for some students. While many medical schools will accept the course as named, those students seeking future degrees in pharmaceuticals, physical therapy, or nursing are required to take a course at Brevard Community College (or elsewhere) to address this issue.

Next, it was commented that there appeared to be a typo on the syllabus for BME 4292 (Biomedical Engineering Design 1) regarding the course schedule. The course is a three-credit course, but the syllabus indicated it only met for 1 hour two days a week. The typo was confirmed, and the actual schedule should be Mondays 4:00 – 4:50pm and Wednesdays 4:00 – 5:50pm.

Another concern was about the number of credits planned for both the fall freshman term (18 credits) and the fall sophomore term (19 credits). It was suggested this course load may be too heavy. In response, it was said that this issue was discussed during the program development, but that it was due in large part to the number of 4-credit courses offered by the Departments of Chemistry and Biological Sciences which are not generally taken by engineering students, though it was understood that these courses have four credits because of the concomitant lab component. It was suggested that BUS 2303 (Macroeconomics) be moved to the senior year since it was not required for any follow-on course and only served to meet the social science requirement of the University core. In the end, it was agreed to remove BUS 2303 and add a social science elective in the fall senior term. Note: Since the Committee did not express a preference one way or the other, after the meeting the College of Engineering decided it would be more appropriate to add the social science elective in the spring senior term rather than the fall senior term.

With regards to the fall sophomore term, a discussion ensued as to how to possibly reduce the course load, but no suitable solution presented itself. After some
discussion, a motion was made to approve the program and associated courses (amended as discussed above) with the understanding that Dr. Mitra and others involved in developing the program examine ways to address this issue and, if a solution is found, return to the Committee with the relevant changes to the program. The motion was seconded.

Before a vote was held, a few additional comments/questions were asked. First, it was noted that there was no math course planned for the senior year, and it was asked whether this could be addressed. In response, it was said that the technical electives can be satisfied with upper-division math courses, and that this would be most appropriate for those students who will pursue an engineering-focused graduate program (as opposed to a biology-focused graduate program). Second, returning to a portion of an earlier discussion, it was asked whether BME 3240 would serve as the computer-literacy-designated course required by the University core. The answer was “yes.” Finally, considering that there presently exists a specialization in biomedical engineering for the M.S. in Mechanical Engineering degree, it was asked whether the proposed courses and program were planned with continuity in mind for graduate students. In response, it was described that the graduate specialization came into existence first because the administration wanted to have a biomedical program, and introducing it at the graduate level as a specialization was the easiest thing to do without demanding significant resources. Now that the undergraduate program is being proposed, it is anticipated that the graduate program will be tweaked to ensure continuity from the undergraduate to the graduate level.

With no further discussion, the motion to approve the program and courses (as amended), with the understanding mentioned above, passed unanimously.

Informational:

The Chair noted the following item.

1. Approval of an Undergraduate Online Course to Have the Same Course Number as an On-Campus Undergraduate Course
   BUS 4504 (Special Topics in Management)

The Chair recognized Dr. M. Bonhomme who informed the Committee that Dr. D. McCay (Chief Operating Officer) formed a committee to examine “hybrid courses.” The purpose of the committee is to have faculty discussions on such matters as the definition of a hybrid course, what support faculty will have in developing these courses, and student awareness of hybrid courses, among other things. Dr. Bonhomme listed the members of the committee and noted that the UGCC would be kept apprised of its proceedings. She also noted that a webinar is scheduled for March 24, 2011 focusing on the development of hybrid courses. It was asked what the committee’s current working definition for a hybrid course was. In response, it was said that none yet existed and that it was one of the goals of the committee to address. Looking on the internet, one could find a wide range of definitions for a hybrid course, but it was emphasized that the
term meant “hybrid” in presentation, not content. Hybrid courses are not necessarily intended to be interdisciplinary courses.

Finally, Dr. Rosiene (Dept. of Humanities and Communications) noted that he has a colleague on the University-wide assessment committee, and that they will be asking that any new program submitted to the UGCC for review include appropriate assessment documentation.

The Chair noted the next meeting time. Our next meeting is Friday, February 25 at 8:00 a.m. in the Physical Sciences conference room. Agenda items are due Friday, February 18.

The meeting adjourned at 8:45 a.m.

Respectfully submitted,

Mark Archambault, Chair