Approved Minutes - Monday, Nov. 1, 2004

COLLEGE OF ENGINEERING COMMITTEE ON ACADEMIC AFFAIRS

Meeting Minutes Monday 1 November 2004

- Attendance:

Aero – Rama Yedavalli
AVN – Not present
BME – Rita Alevriadou
CHE – Jeff Chalmers
CEGS – Bob Sykes
CSE – Tim Long
ECE – George Valco
ENG PHY – Not present
FAB – Jay Martin
IWSE –
ISE – Not present
WLD – Not present
MSE – Rob Wagoner (Chair)
ME – Not present
Graduate Student – Yakup Bayram, Jeff Prescott
Undergraduate Student – Shawn Gelsinger, Matt Schwaberow

College of Medicine Liaison – Not present

Secretary – E. McCaul

Guests – B. Baeslack, R. Gustafson, R. Smith

- The Minutes from the 4 October 2004 meeting were approved as written.

- George Valco updated the committee on the Council on Academic Affairs’ (CAA) activities.
  - Engineering’s Clinical Faculty proposal is in Subcommittee A. While law’s clinic faculty proposal has been approved ours is giving the subcommittee more to consider. George does not know when it will come before the full committee.
  - Engineering’s GEC proposal and the Environmental Engineering Minor are in Subcommittee C. George does not know when either one will come before the full committee.
  - George believes that the ISE curriculum proposal is in Subcommittee D as he has not heard about it being assigned to one of the main subcommittees.
  - CAA will soon be requiring that all proposals submitted to them be submitted electronically.
  - Vice Provost Barbara Snyder came to one of CAA’s meetings to update the committee about ongoing events.
    - A committee has been formed to look at the funding of graduate programs. The committee is looking at how funding of programs should be driven by quality of the program rather than by enrollment or head count.
    - A committee is being formed to review undergraduate education. Its formation was partly driven by open admission and the 2007 reaccreditation. Some of the areas the committee will be looking at are the number of faculty, body of knowledge we expect all students to have mastered, number of hours to graduation, role of freshman seminars, and who is teaching undergraduate courses.
    - Vice Provost Snyder is also working with the Office of Undergraduate Studies and the Office of Research to create an Office of Undergraduate Research and to coordinate central support for undergraduate research.
  - Allied Medicine has submitted a proposal for an undergraduate major in biomedical sciences as part of the current BS degree in Allied Health Professions. This is a controversial proposal as the major is not being offered through Biological Sciences. Consequently, Arts & Sciences is objecting to it.
CAA is increasingly seeing proposals that are more complicated than were typically seen in the past. Complications are taking the form of proposals that cross boundaries or that change organizational structures. The new major in biomedical sciences is one example of a proposal that crosses boundaries. An example of organizational change is the proposal to merge the John Glenn Institute for Public Service and Public Policy with the School of Public Policy and Management.

George was asked if he knew what the status of the Biomedical Departmental Proposal was. The reply was that he had not heard anything about it. The committee secretary was tasked to find out what the status of the proposal was. The Dean commented that everyone needs to be aware that when a department’s creation is approved that it does not mean that it will be instantaneously created. Once a department’s creation has been approved there is still some administrative work that needs to be done before the department can become functional.

The floor was open to the dean for comments.

The dean commented that his nearly 5 years at RPI was an enlightening experience relative to undergraduate engineering education. RPI is a private institution with an undergraduate enrollment of about two thirds that of OSU’s. At RPI, undergraduate engineering education has a history of excellence and innovation in pedagogy, the effective application of technology (including a laptop program that requires all undergraduates to have the same laptop and software), a faculty that values undergraduate education, and a very student-centered teaching approach. Classes are small and the use of technology is strongly encouraged and supported in the classrooms. Based on his experiences there, his expectations of undergraduate education have been significantly raised. The College of Engineering has done many good things but there is still room for appreciable improvement in our undergraduate education, from our freshman experience to the capstone design experience.

The dean is interested in creating some showcase classrooms and facilities. He would like our undergraduate programs to reach such a level of excellence, innovation, and visibility such that every student in Ohio who is interested in engineering would clearly make OSU their first choice. We need to educate our undergraduates with a strong underpinning in science and engineering, along with other skills such as leadership, team work, entrepreneurship, and innovation.

The question was asked as to how the dean views the role of CCAA. The response was that he feels that CCAA should be much more than just a committee that approves proposed program additions/changes, but rather considers the education of our students with a strategic point of view – what should undergraduate education be like five years from now? The dean feels that CCAA needs to be a proactive and innovative group. CCAA should create subcommittees and work with other college ad hoc groups that will
develop plans and ideas for new curricula with the final approval being done by the entire committee. The comment was made that this is a completely different view of CCAA’s role that the one held by former Dean Ashley.

- The question was raised as to the dean’s opinions on the structure of the college. The response was that the dean feels that the significance and impact of academic departments nationally are decreasing relative to the past, and that interdisciplinary programs in both education and particularly in research are becoming increasingly important. This change is being evidenced nationally by the construction of interdisciplinary research buildings that house faculty and students from many different departments and colleges. Departments will continue to be important as they provide a home for core undergraduate programs that are consistent with ABET requirements and industry needs, and they provide a sense of identity (TIU) and community for faculty and students. Larger departments offering multiple programs are also becoming more the norm as they promote breaking down the walls between disciplines and promoting interdisciplinary interactions in both teaching and research. If we are to compete nationally we need to further grow our interdisciplinary research, not just in engineering but across colleges. We also need to have a sense of focus and priority in our disciplinary and interdisciplinary activities. We should not just be hiring someone because they are generally the best person available, but rather hire outstanding individuals who align with strategic priorities in research areas in which we are or have the ability to be among the nation’s best. We cannot afford to be everything to everybody, that just leads to mediocrity. Department ratings are 100% reputation and a greater emphasis on interdisciplinary research will improve our reputation.
- The dean feels that we need to generate more federally funded large interdisciplinary research centers.
- The dean also feels that we need to create a true interdisciplinary capstone course which will raise our level of undergraduate education. We want to get the best students in Ohio because of our outstanding and creative programs.

- Ed McCaul presented the Course Proposal Subcommittee’s recommendations to the Committee.
  - The following course requests were recommended to be approved by the subcommittee: CSE 630, CSE 779, ECE 779, ECE 813, FAB 732, MEC 482, CBE 774, and MSE 774. Jeff Chalmers asked if Chemical and Biomolecular had concurred on FAB 732. Jay Martin responded that while they had not been asked that some of their professors were aware of the course. Jeff requested that CBE be given the opportunity to concur on the course. A motion was made by Bob Sykes to approve the requests with the contingence on FAB 732 that a concurrence letter be received from CBE. George Valco seconded the motion. A vote was taken: 9 approved, 0 opposed, with the chair abstaining. The motion passed.
There being no further time the meeting was adjourned.

C: College Faculty

CCAA File