CCGB MINUTES  
February 13, 1998


Members Absent:  J. Abel, D. Grubb, J. Hopcroft

Ex-Officio:  B. East, K. Hover, D. Maloney Hahn, F. Shumway

Others:  Sandy Dennis-Conlon

Because J. Abel, CEE, Chair, is unable to attend today’s meeting and the vice-chair, C. Van Loan, CS, is presenting, D. Bartel, MAE, has agreed to chair today’s CCGB meeting.

Minutes:  D. Bartel, MAE: Minutes of February 6 approved with the following revisions:  D. Maloney Hahn, Advising: Normally freshman schedules are booked with 3-4 math, science, engineering and the freshman writing seminar.

Announcements:  K. Hover, Assoc. Dean:  At the February 6th CCGB meeting it was decided that the College of Engineering would not participate in the graduation regalia and K. Hover would report that to the Assoc. Dean’s meeting.  Upon reporting that the College of Engineering would not be participating in the purchase of regalia, engineering felt that this was the time when all students could stand as one.  Due to the rigors of the engineering school, it was felt that all students deserved to be recognized as completing their degree requirements.  It was reported at the Assoc. Dean’s meeting that all colleges in the university except Arts & Science and Engineering were in favor of honors regalia.  The university has instituted the following policy although it is not binding (see attached).

1. Honor Societies are permitted to recognize their members with a distinctive read and white cord.  The definition of Honor Society rests with the Deans of each college.
2. Students graduating “with honors,” i.e., in an honors program or equivalent will be recognized with a distinctive Gold Cord.
3. Students graduating with academic distinction (Cum Laude, Magna Cum Laude, Summa Cum Laude) will be recognized with a gold satin stole.

Public relations of not conforming to the policy may come into play for engineering.  It could be announced in some fashion at graduation that the college felt that this was a time when students could stand as one, etc. or another possibility would be to give all engineering students a cord to match their tassel.  College of Arts & Science is seriously thinking of doing the later.

B. East, Admissions:  Agrees in principle, philosophically but thinks consistency within the university should prevail as admissions is striving to look like one institution.
C. Van Loan, CS:  Perhaps we should follow A&S in whatever they decide to do.
J. Jenkins, T&AM:  Suggests trying to change the opinion of the Architecture college into following engineering and A&S.
B. Kay, GS:  He is in favor of going with cords if A&S are doing so.
K. Hover, Assoc. Dean: This regalia thing started last year when the university switched vendors and the new vendor came up with a very strong marketing scheme in which all the colleges jumped on board. Honors regalia were not a part of graduation prior until this last year.

K. Gebremedhin, ABEN: ABEN department has purposely decided not to mention honors within their degree awarding ceremony in order to treat all students the same at graduation.

K. Hover, Assoc. Dean: Please let the recording secretary know if your department has a nationally recognized honor society. Traditionally the university has recognized honor societies and they have had regalia in connection with them.

P. Kintner, EE: Should this issue be pumped up to the university president’s office?

K. Hover, Assoc. Dean: The Assoc. Dean’s meeting is called by Vice President Murphy’s office.

J. Jenkins, T&AM: If engineering decides to do something different from the majority of the university isn’t it possible to put some wording in the programs.

B. Kay, GS: This may be perceived as a quarrel among the colleges and would not be good press for the university.

Report for Biology Sub-Committee: C. Van Loan, CS, Chair of the Biology Sub-Committee has created a web site for biology in the engineering curriculum (attached). Biology is increasingly important in engineering and attracts prospective students. Bioscience is not part of the core science requirement at this time. Companies want engineers who can think analytically not necessarily with biology as part of their program. Entry level biology courses are available such as ENGRI 120 and many core courses are also available. Approved electives are options in which students, who wish, may take biology courses. Many courses are available with a biology component in them including several biological science courses. New courses are appearing which also have biology built in. Courses with biology in them are listed on the web site. If a department knows of any courses that should be added send them to C. Van Loan. The biology sub-committee looked at ten different schools to see what they offered in the way of biology. For example:

University of Michigan has a fifth year MEng in biology program.

Rice has just been awarded a big grant from the Whitaker Foundations and will be starting a Bioengineering major in the future.

RPI has an undergraduate major in biomedical engineering.

University of Pennsylvania also has an undergraduate major in Bioengineering in which students take a biology course a semester for the eight semesters.

MIT has one biology course requirement for all engineers. There are three different biology options students can choose.

Purdue does not have a major in biology but they do have an interdisciplinary program similar to our College Program in which students can major in biology. Unlike our College Program, Purdue’s program is high profile.

Dartmouth had a general course in Introduction to Biotechnology that is offered by the Thayer School.

John Hopkins has a tremendous course for undergraduates in biology.

University of Illinois has a bioengineering minors program.

Georgia Tech has a certificate program. Both Illinois and Georgia Tech have a minors program with a biology minors program available.

In summary, although this is not a report but rather information regarding biology, the biology sub-committee will be meeting again to discuss this issue further. A Bioengineering option and a possible minors program are interconnected. Biology could be offered in the senior year as students are starting to think like engineers.
B. East, Admissions: What about Princeton?
C. Van Loan, CS: Committee will look at Princeton.
J. Jenkins, T&AM: How does ABEN view biology in the college?
K. Gebremedhin, ABEN: The Bio-option serves a purpose for students interested to include biology in their program. Biology is important to ABEN students because we apply engineering principles to biological systems. I believe that biology is now what physics has been to engineering. Student should be aware of biology, even if only to be able to understand what they read in scientific magazines.
C. Van Loan, CS: Physics offered a course with L. Jelinski previously.
B. East, Admission: Thought this course was offered every other semester.
F. Wise, A&EP: A&EP has had the course “Physics in Life” in which L. Jelinski has taught, although she is not a member of the A&EP faculty. A&EP has just hired a biophysicist and would be a possibility for teaching this course.
D. Bartel, MAE: Students in MAE who are interested in biology are mostly pre-med. MAE students can put together a bioengineering program.
C. Van Loan, CS: Engineering has many biology courses and others may be offered in the departments.
J. Jenkins, T&AM: A typical path in each department could help students get a bioengineering program.
M. Shuler in ChemE has a list of courses available in the bioengineering option program.
K. Hover, Assoc. Dean: He recently attended the Big 10 + meeting of Deans in Engineering in place of J. Hopcroft. At the meeting he found out that Illinois had a one and three plan until a couple of years ago in which they retooled the requirements by dropping physics from three courses to two, making room for a bioengineering course. Iowa State has a premiere course in biology.
C. Van Loan, CS: Biology sub-committee would be happy to organize the department path for students interested in biology, seeing what could be done in each major.
J. Jenkins, T&AM: An Introduction to Engineering with biology in it would be beneficial.
M. Duncan, ChemE: If you looked at the syllabus for ENGRI 120 you may find just such a course.
P. Kintner, EE: A lot of students entering engineering with advanced placement. A change in the common course structure so students even with advanced placement credit still had to take four sciences even if they had to take a science option may be a good idea.
D. Bartel, MAE: Could require students to take one biology course from the list in the bioengineering option program with advanced placement credit in biology counting towards this. We could effectively do what MIT is doing by narrowing down options with road maps for students.
R. Kay, GS: What percentage of incoming students have advance placement in biology?
D. Maloney Hahn, Advising: 10-15% do.
C. Van Loan, CS: Cognitive studies is a favorite model for an interdisciplinary program. Funding from NSF is available for this type of program.
D. Bartel, MAE: Bioengineering Option is chaired by M. Shuler. There is not enough funding available to develop a bioengineering department and the Dean is not in favor of a bioengineering department and has stated publicly that fewer departments would be better. What is driving the whole system is the Whitaker Foundation. Our major competitors are going after this type of funding. In order to qualify for the funding the colleges must be willing to create a
department for biology. To be a true biology department you would need to have a miniature engineering college.

J. Jenkins, T&AM: Maybe the departments could become more involved through a virtual department linking everyone together.

**Announcements:**

B. East, Admissions: Thanks to all faculty who have volunteered for the phoneathon to prospective students. Admissions is asking faculty to make the phone calls prior to acceptance letters going out to students. Volunteering faculty will be contacted by next Friday for an invitation to a training lunch. Phoneathon will be for a two-week period. Again, thanks for all who have volunteered.

Meeting adjourned 9:00 a.m.

**Tentative agenda for February 20, 1998, meeting in 201 Hollister:**

1. Approval of February 13, 1998 minutes
2. Announcements (Hover)
3. AP Credit in Physics (Jenkins)
4. Continued discussion of Frosh Advisor Distribution Algorithm (Hover)
5. Initial discussion of proposal from Minors Subcommittee (time permitting)