CCGB MINUTES
April 10, 1998


Members Absent: J. Hopcroft, C. Van Loan

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

Others: S. Dennis-Conlon

Minutes: J. Abel, Chair, CEE: Minutes of April 3, 1998 approved as distributed.

Biology Sub-Committee Report: J. Abel, Chair, CEE: In addition to the proposals from the Biology Sub-Committee much information has been pulled together regarding biology in the undergrad engineering curriculum – a tremendous effort by the sub-committee. Copies of the report will be distributed to the faculty. A motion for two proposals (boxes on p. 4 of report) from the sub-committee is on the floor, which requires no second. Are there any additional comments or discussion from any depts.?

P. Kintner, EE: The feedback from the EE faculty is the possibility of more options were favorable but not as a requirement. Re-packaging biology is a good idea.

D. Bartel, M&AE: The informal discussions from M&AE faculty supports EE depts. comments.

K. Gebremedhin, ABEN: The proposal makes more flexibility for students to take different courses in biology and creates more exposure from a marketing standpoint.

D. Grubb, MS&E: The MS&E dept. supports the idea of flexibility for students but the overall discussion of the curriculum does not support this.

P. Kintner, EE: Right now the distribution courses have 2 or 3 choices; this proposal would make many more choices.

J. Abel, Chair, CEE: Proposal #2 could be referred to the Engineering Distribution sub-committee; P. Kintner currently is chair. The sub-committee could look at the list and decide which courses might be added to the engineering distribution list. An e-mail from C. Van Loan, Chair of the Biology Sub-Committee, indicates that the CS dept. is against the proposed biology requirement but would be very much in favor of a rigorous Bio-for-Engineers course, in the style of MIT, that could be used as one of the 4 core science courses.

K. Gebremedhin, ABEN: The sub-committee thought that proposal #2 would be a soft transition toward biology in the future.

P. Kintner, EE: Many meetings ago, when this topic was first introduced, a suggestion was made that biology could be substituted for the chemistry requirement.

K. Gebremedhin, ABEN: The sub-committee thought the current science courses were important so did not discuss the option of chemistry and biology being interchanged.

D. Grubb, MS&E: MS&E is not in favor of going with biology as we did with the technical writing courses. It is not easy to think of a wide variety of beginning biology courses as with the writing courses. Not many of the courses on the bioengineering list are introductory in nature.

K. Hover, Assoc. Dean: The writing and computing courses can fulfill other requirements.
J. Abel, Chair, CEE: Those in the environmental option of Civil Engineering could already fulfill a biology requirement, and the students in the civil option could fulfill this requirement with little change. The students in Chemical and ABEN could also fulfill this requirement with little change.

D. Ruppert, OR&IE: As of now most student in OR&IE would not be able to fulfill this requirement.

J. Abel, Chair, CEE: Proposal #1 from the Biology Sub-Committee states:

Create a biology requirement in the spirit of the writing requirement and the computer applications requirement. It should read as follows: A student must take at least one course selected from the Bioengineering Option course list.

With this proposal the biology course could simultaneously fulfill other course requirements.

M. Duncan, ChE: The biology proposal was not discussed in the ChE faculty meeting, therefore ChE will have to abstain from voting.

J. Abel, Chair, CEE: If proposal #1 passes, it must go to the faculty for a vote. The faculty meeting is scheduled for April 20th and we would like to add the biology proposal, if approved by the CCGB, to the agenda. That meeting call will need to go out today.

D. Bartel, M&AE: M&AE would have to speak against proposal #1 as some courses in the bioengineering option list do not have any biology in them rather they have biological systems. For example the M&AE course that D. Bartel teaches does not have a biology content such as Bio 101.

F. Wise, A&EP: The A&EP faculty had no strong feedback. The report was distributed but no feedback has been received.

J. Abel, Chair, CEE: The choices are to proceed with a vote or to table the motion. If the proposal is approved, it will go to the faculty for vote. If opposed the proposal could go back to the sub-committee for further recommendations.

J. Jenkins, T&AM: Could we proceed with a straw vote to see what are the opinions?

J. Abel, Chair, CEE: Called a straw vote on proposal #1 with results:

1 in favor, 8 opposed, 2 abstained.

Based on this straw vote, proposal #1 would not pass but that does not reflect, in any way, upon the good work done by the sub-committee. Is there a motion to table proposal #1?

K. Hover, Assoc. Dean: I move to table the Biology Sub-Committee’s proposal #1.

J. Jenkins, T&AM: Second the motion.

J. Abel, Chair, CEE: Motion to table proposal #1 passed with 10 in favor and 1 abstention. Alternatives now are to ask the sub-committee to make further recommendations.

F. Wise, A&EP: Is this a consensus?

D. Bartel, M&AE: M&AE is in favor of a modified distribution list. The problem with the bio-engineering option list not enough biology content in some courses. One options could be a reconstruct the science courses and create a specially made biology course for engineering students.

J. Abel, Chair, CEE: Instead of considering proposal #2, we could ask the Distribution Sub-committee how the current Biology and Chemistry list might be expanded from the Bioengineering Option list or whether to create separate lists for Biology and Chemistry. Proposal #2 states:

Liberalize the Biology and Chemistry Distribution so any entry in the Bioengineering Option course lists can be used to satisfy the requirement. Currently allowed are BioG 101 & 103, BioG 105, BioG 107, and Chem 389.

P. Kintntner, EE: This proposal is different from the way other distribution courses are developed. This would require substantial thought to make it consistent with other distribution courses.

R. Kay, GS: The distribution courses are mostly covered by depts.

D. Maloney Hahn, Advising: What are the categories? We need to define the distribution list in the same spirit that are already there.

K. Hover, Assoc. Dean: Is there a sense that proposal #2 is where we want to go?

D. Grubb, MS&E: There will not be much impact as students do not have many choices in there distribution courses.
P. Kintner, EE: Should only a few more courses be added to the distribution list? The Bioengineering Option list is too long and needs to be narrowed down.

J. Abel, Chair, CEE: The sub-committee is to reconsider what is on the list but as a more modest addition. In place of proposal #2 the Distribution Sub-committee can review the list and choose to expand it or not to. Is it the general consensus of the CCGB to refer this to the Distribution Sub-Committee? Committee members are P. Kintner (Chair) P. Krusius, K. Gebremedhin, Z. Haas. As some of the sub-committee member terms have expired the chair can renew the membership to the committee.

K. Gebremedhin, ABEN: Can the Biology Sub-committee have an idea of the biology/science requirement? Is there a message to the sub-committee from the CCGB?

J. Abel, Chair, CEE: Is there possible interest in a biology requirement?

F. Wise, A&EP: Is there some confusion as he thought the CCGB was not in favor of a requirement?

J. Abel, Chair, CEE: Report by the sub-committee indicates that it was decided not to propose the requirement of an additional science course.

K. Gebremedhin, ABEN: The sub-committee thought that the CCGB would not want to look at a requirement proposal.

D. Maloney Hahn, Advising: It would vary from field to field if a switch between biology and chemistry would be possible. Do we develop a course to be able to take the place of chemistry? What is the sentiment of the CCGB?

P. Kintner, EE: EE dept. would be in favor of a biology substitute for the Chem requirement with the option between the biology and Chem courses.

D. Bartel, M&AE: M&AE allows a substitution for the 3rd science course and could be a trade off between Chem and Biology courses.

D. Ruppert, OR&IE: The OR&IE dept. would be in favor of a substitution.

J. Abel, Chair, CEE: Depts. are not in favor of additional courses beyond the current four science courses. In CEE, environmental does not allow substitutions but civil does.

D. Bartel, M&AE: There is resistance to a requirement. Inability to see how to reconstruct the basic sciences to add biology. This would involve a number of faculty and create a new course.

R. Kay, GS: This would be adding a new course and an additional requirement.

J. Abel, Chair, CEE: Five fields indicate they would consider a biology as an option within the four-course science group. I suggest that the Biology Subcommittee look at this again with possible recommendations coming in the next academic year. The development of such a course initially as an optional substitution might be the first step in further consideration of a bio-science course in the engineering undergrad curriculum.

J. Abel, Chair, CEE: Proposal #2 is referred to the Distribution Subcommittee with the possibility of expanding the list but not within the specific confines of the proposal.

**Technical Writing Committee Report:** S. Youra, Director of the Engineering Communication Program, presented a brief report on the Technical Writing Committee (attached). The committee has restructured with representatives from each dept. (except CS) along with the staff from the Engineering Communications Program. The function of the committee is advise the Engineering Communications Program, review materials from the writing intensive courses, and serve as a conduit to curriculum in each field. The review of several writing intensive courses is taking place this spring. Reviews are scheduled to take place every three years. In addition, the committee is scheduled to meet with several departments to facilitate communication and assist in the teaching of writing courses. FYI several course numbers have been changed as noted in the handout.

**Announcements:** J. Abel, Chair, CEE: Distributed the Computing requirements and guidelines which were adopted by the CCGB in 1991. These are relevant to the discussion at the last meeting.
and the subsequent charge by the CCGB that the Computing Subcommittee (D. Grubb, MS&E, Chair) re-examine the current computing requirements.

K. Hover, Assoc. Dean: A recent discussion in the Assoc. Dean’s meeting was about a possible change in the academic calendar in response to recent relations between the university and the Ithaca community regarding block parties occurring during senior week. The thought behind changing the calendar is that there will be less time for students to “party” if the time between the end of finals and graduation was reduced. The discussions revolved around starting spring classes two days later (Wednesday rather than Monday) which in turn puts the last day of finals on Tuesday, shortening senior week to three days. The Assoc. Deans, due to the heavy concern from administration of repercussions from senior week, have voted to continue discussions in this vein. K. Hover will forward an e-mail regarding this discussion to CCGB members.

J. Abel, Chair, CEE: The Engineering Policy Committee has also had discussions regarding senior week. Changing the academic calendar changes everyone’s schedule, not just seniors. For example, undergraduates would lose almost one week of summer job opportunity.

K. Hover, Assoc. Dean: The mood of the administration is that there is a need to do something. Expectations of senior week are grim.

K. Gebremedhin, ABEN: Can we dictate behavior other than academically?

K. Hover, Assoc. Dean: Distributed spreadsheets on faculty advisor numbers. The spreadsheets indicate the number of available faculty (FTEs), the number of students who will need to be advised by Engineering faculty (2855), and the number of advisors available to advise (with and without spring leaves counted). Please review the information and send back any feedback to K. Hover. Meanwhile start looking at the faculty who will be available to advise and send names to the advising office.

Meeting adjourned at 9:10 am.

Agenda for Friday, April 17, 1998:

1. Approval of Minutes, April 10, 1998
2. Announcements (Hover)  [Liability Issues, ABET, Frosh Advisors]
3. ROTC Proposals (Hover)
4. Possible Course Evaluation Revisions ( Hover)

Tentative Agenda for Friday, April 24, 1998:

1. Approval of Minutes, April 17, 1998

Tentative Agenda for Friday, May 1, 1998:

1. Approval of Minutes, April 24, 1998
2. Announcements (Hover, Abel)  [Pro-rated Tuition, Architecture Concentration, CCGB Subcommittees, Business Courses for Engineering Undergraduates]
3. ABET Planning (Hover)
4. Technical Writing Committee Update [if any] (Wise, Youra)