CCGB Meeting Agenda, February 6, 2009

1. Approval of minutes
2. Undergraduate announcements
3. Possible motion from Minors Committee on changes to the CS minor (Cisne)
4. Possible motion from the Engineering Courses Committee on approving ECE 3100 as an engineering distribution course (Bland)
5. Report from Chem/Bio subcommittee (Jim Engstrom, Chair) and discussion

CCGB Minutes, January 30, 2009

Ex-Officio: K. Dimiduk, B. East, L. Schneider, F. Shumway, M. Spencer
Other: B. Howland, M. Hutson, C. Pakkala, N. Peterson

Approval of Minutes: The minutes of the 12/12/08 CCGB Meeting were approved as written.

Undergraduate Announcements: B. East stated that applications are up 20% in engineering; they are up across the university, but not as much. D. Gries said that engineering colleges across the country are reporting increases in enrollment. M. Spencer said that most colleges at Cornell are up 2 or 3%. The freshman class size in Engineering moved from 710 to 735, which is a little bit of an increase, with a total increase of 100 students at the university as a whole.

D. Gries said that C. Ober approved the 3.5 GPA requirement for the Dean’s List, which will be effective beginning Fall 2009.

E. Fisher said that her term as Assoc. Director of MAE ended. M. Louge has taken over that role and will be the voting member for MAE at the CCGB. E. Fisher is remaining as CCGB Chair.

Comments on TAM impact on College Curriculum Issues: D. Gries stated that at some point, MAE and Tam will merge. TAM will remain as a graduate field. The bylaws say that the CCGB has a member from each department, so the TAM membership will disappear, but anyone can come to CCGB meetings.

The issue of teaching math courses remains, and small courses may be eliminated because of budget problems. Dean Lepage of A&S is forming a task force to look into the issue, and engineering will be involved.

A merger will require a careful look at the formula for determining the numbers of freshman advisors from each department/school.

The merger doesn’t seem to affect the core curriculum. A major can require only 1 distribution course; that won’t be changed. It has not been decided when TAM formally goes away; which might cause some difficulty in making changes to the Engineering Handbook.

A. Ruina said that TAM asked him to bring this issue up. There is a clear understanding that nothing will change in the courses during 2009-2010. They will submit courses with minor modifications. The intention is to dissolve the department, and the Transition Committee is working on this assumption. No date has been set for dissolution of the department. If it is dissolved prior to May 2010, there may be some technical issues regarding the courses. The transition should be invisible through May 2010 for students and faculty outside the department. The general consensus in TAM and MAE is that there will not be a major change in the curriculum. The graduate fields don’t offer courses; they will need to find a name and home.

D. Gries said that there are INFO courses and but no Info. Sci department; it is an informal program in CS and CIS. The TAM course name could remain with MAE managing it.
A. Ruina said that he will remain on the CCGB. He said that the math courses are really key and are the main issue for the CCGB to be worried about. There is a treaty with TAM and the Math Department that goes back about 40 years; both departments own Math 293 and 294. Math may not uphold the treaty once TAM is dissolved. The expectation is that MAE will inherit the math courses and the treaty will not be changed much. If the Peter Lepage Committee gets rid of small section calculus, it will likely go back to math. The advisee load is based on the number of faculty members within a department, so the body count will be affected by which faculty goes where.

A. Ruina said that there is a rule that majors cannot require as distribution courses those courses offered by their own department. Gries said that this is not true. Ruina said that the distribution courses as they are listed seem fraudulent; students don’t seem to have much choice in what courses they are taking. D. Gries said that the idea of the distribution courses was to ensure that students receive some kind of breadth in their education. Many departments require a second distribution course in their major.

B. East said that Peter Lepage and Kent agreed that a committee would look at math because it costs a lot of money to teach the math courses. A. Ruina said that the TAM department is attached to math teaching, due to TAs and a philosophy of applied math identity that it doesn’t want to lose. The MAE faculty is willing to accept the preservation of identity.

L. Pollack said that she has heard troubling reports about chemistry and urged that someone watch math carefully to make sure it doesn’t go the same way. D. Gries responded that we do have the Chem/Bio Liaison Subcommittee, which Jim Engstrom is in charge of, but we have not yet received a report from him.

M. Louge warned that the potential loss of small-section Math 191 and 192 will adversely affect the quality of freshman instruction. The CCGB should make a strong statement to the Dean and provost that reversing Dean Street's pedagogical reforms of the 1980's will damage our reputation. We should work with the Math department to uphold the highest standards of pedagogy in those courses.

A. Ruina said that a boundary condition is limited to the amount of resources available; the Provost sets allocations. Several times Kent Fuchs said he didn’t think math should be taught in the Engineering College. Negotiations won’t make sense unless resources are considered. B. East said that Kent Fuchs couldn’t understand why the Math Department couldn’t teach math the way we wanted it taught. D. Gries added that he also couldn’t understand why engineering should pay for it.

S. Baker said that the Curriculum Committee looked at this and thought courses should be taught by the departments that offer them. Math doesn’t exactly follow that rule. He has been following the chemistry story and it sounds the way the math story is going. D. Gries said that the CCGB should have a small committee look at small math and determine if resources are available for it. E. Fisher said that D. Cox and some others prepared a report on this; it can be made available to the CCGB. We need to determine what is happening with math; the Math Liaison Subcommittee needs to draft a resolution for the CCGB on this topic. B. East said that she worked closely with the Math Department when a new section was created. They were fine once we included them. Perhaps D. Gries should talk with the Math Chair and let them know they will be informed of any steps that Engineering is taking regarding math.

A. Ruina said that he thinks Math perceived that MAE was taking over TAM and could take over the treaty. We need to respect their authority. M. Louge emphasized that MAE is not taking over TAM; the departments are uniting. Faculty members have united and nothing has really changed for now. The Transition Committee is working well.

**Follow-up on Issues Related to Class Size and Teaching by Non-faculty:** E. Fisher said that at the 12/12/08 CCGB Meeting R. Bland related issues to class size and teaching by non-faculty. There were FAQs on the Engineering Website about class size and numbers that didn’t appear to be correct. M.
Spencer said that he will update the website FAQs based on actual numbers; he will obtain information from our Registrar’s Office.

B. East said that she has actual enrollments for classes contained in about 30 pages and broken out by department, faculty, number of credits, etc. R. Bland stated that it is important that we’re straight with prospective students and their parents about actual enrollments. M. Spencer said that in the Admissions FAQs there are general numbers about class size at the university. The chemistry class is totally different now because it is a much bigger size. He is looking at the engineering piece and updating those numbers.

E. Fisher said that there is also an issue about who is teaching classes. Faculty members are listed in the FAQs as teaching classes. This is somewhat tricky because some people are appointed as lecturers, instructors, etc. It is reasonable for a parent to be upset if a grad student is appointed as faculty. Some non-tenure track people are appointed as faculty. B. East said that the objective is to figure out what type of experience current students have and make it better for them and also to market the college. Prospective students don’t know which people are faculty members and which people aren’t. R. Bland stated that we need to give the correct information to the public.

E. Fisher said that she and D. Gries talked about charging the Student Experience Committee to look at this. She wants to get some idea of the scale of the practice of appointing graduate students as instructors, a practice that seems in contradiction to the FAQs. She wants to find out how widespread it is and modify the publicity to make it accurate.

ECE: T. Fine said that grad students only teach sections; no grad students have taught a course. TAM: A. Ruina said that only about 3 small sections of calculus or a summer version of Math 293 or 294 have been taught by grads in TAM. CS: D. Gries said that some 1-credit courses are taught by grads but are overseen by faculty. He doesn’t think a 3 credit course would be taught by grads, except perhaps in the summer. CBE: M. Duncan said that no grads are teaching courses. CEE: W. Philpot said that no grads teach a course; some might occasionally fill in for lecture. AEP: L. Pollack said that AEP doesn’t allow grads to teach courses. MAE: M. Louge said that no grads are teaching courses. Perhaps once a grad student taught a summer course; he was finishing his PhD and the course was in his specialty. ORIE: R. Bland said that at least one grad student teaches each semester.

Possible Motion from Minors Committee on Changes to the CS Minor: J. Cisne said that the Minors Committee found nothing wrong with the CS proposal to bring their minor in line with the requirements. E. Fisher said that the issue is non-controversial. The major is no longer scientific computing so the minor isn’t requiring it either. The CCGB will look at this next time and then vote. The motion will be distributed to the CCGB members with the minutes.

Possible Motion from the Engineering Courses Committee on Approving ECE 3100 as an Engineering Distribution Course: E. Fisher said that the Engineering Courses Committee approved the proposal to allow ECE 3100 as a substitute for OR 270 in the Probability and Statistics area. They thought perhaps it would be appropriate as an ENGRD course. T. Fine is amenable to this. The issue will be discussed at the next CCGB.

Upcoming CCGB Issues: E. Fisher stated that there are a few upcoming issues for the CCGB to address. She hopes to have a report from the Chem/Bio Liaison Committee & Jim Engstrom.

L. Pollack and the Math & Science Committee have looked at the substitutions issue and will hopefully have a report soon.

The Independent Major is also an issue. There are not many attractive options. A. Ruina brought up the possibility of splitting up the Independent Major into two majors: a safety net and a real major. E. Fisher sees this as unattractive and hard to justify. Maybe it should be harder to get into the IM. This is also seen as unattractive. D. Gries said that doing nothing is unattractive, particularly for OR. We need to
resolve this issue. A. Ruina asked what would happen if the bar were raised. D. Gries replied that many of the students would be kicked out of Engineering. Students are bringing down the OR classes. R. Bland said that the OR classes are already much bigger than they should be, and students who can’t affiliate with OR and affiliate with the IM increase the class size.

S. Baker said that the class grades should be dependent on performance. A safety net is important in the IM. The option for the students to create something they want to do is also important. L. Pollack said that she has supervised a number of IM students; they need to come to her to get into the major. She wondered why OR doesn’t refuse to sign the form that lets students use them as the Primary Area in their IM. R. Bland said that the students are persistent. D. Gries said that when a student can’t get into the major of their choice, they gravitate to OR. T. Fine asked what the bottom edge is of the IM. He suggested that perhaps the GPA requirement is too low. D. Gries said that the IM Committee may admit students conditionally who have GPAs under 2.0. The students tend to do better when they get into the IM.

A. Ruina said that if he has a bad student, it takes away from the good students. The center of gravity moves due to weak students. He likes the IM and thinks too few students take advantage of it. Having bad students in it hurts the major. There needs to be some place for students to fit in. A safety net and the IM should serve 2 different populations.

E. Fisher said that at the next CCGB a straw poll should be conducted about this issue. R. Bland said that based on the consensus of a previous CCGB discussion, OR will require a minimum grade in some of its pre-requisite courses. Maybe we should have an interdisciplinary major as well as the Independent Major.

D. Gries said that a message about the fall course assessments had been sent out. We need help in getting course assessments so that ABET 2010 goes well.

E. Fisher stated that if the CCGB meets on 2/6, M. Walter will chair the meeting.

The meeting adjourned at 9:00 a.m.