

# COLLEGE OF SCIENCE AND TECHNOLOGY

Minutes of the Collegial Assembly  
May 6, 1999

Louis Raymon called the meeting to order at 2:50 PM. The following were present:

Biology	Chemistry	CIS	Geology	Mathematics	Physics	College Administration
Sanders	Jansen	Friedman	Anderson	Berhanu	Dubeck	McMenamin
	Krow		Ingargiola	Grandstaff	Chein	Gawlinski
	Wunder		Stafford	Hill	Conrad	Intemann
				Myer	Grinberg	Lyyra
				Nyquist	Mendoza	Mihalisin
					Passow	Neville
					Raymon	
					Reich	
					Szyld	

## Approval of Minutes

The minutes of April 13, 1999 were approved.

## Reports

There were no reports from the Dean or the Chair. **Dubeck** reported for the **Budget & Planning Committee**.

The Legislature has passed an appropriation reflecting an increase of 7.5%, rather than the expected 2.5%.

This amounts to \$5,000,000 in additional money, and the current budget crisis is over. The President will sign appointment letters.

## Old Business

**Hill** presented the second reading of the **Neuroscience Ph.D. proposal**. A copy of the proposal is part of the official copy of these minutes and can be located on the College website. **Mihalisin** expressed concern that the Assembly was too sparsely attended to seriously consider a new Ph.D. program. **Hill** responded that this is not a new Ph.D. program: it is specialization within the Biology Ph.D. degree. The graduate's transcript will include the notation "Specialization in Neuroscience." **Sanders** noted that the graduate will have to fulfill all of the requirements for the Biology Ph.D. **Reich** asked if there were students waiting to obtain this type of recognition, and **Sanders** said he believed there were. **Hill** added that students had been graduating with neuroscience Biology Ph.D.'s, but that their specialization was not officially recognized. **Ingargiola** asked if there was a budgetary impact. **Hill** responded that no new courses were proposed, and that students had been able to complete the requirements without recognition. **Chein** noted that the extensive hiring in the area of neuroscience had an impact on the budget, but conceded that the hiring was not motivated by the proposed specialization. He asked why Philosophy 444 was included as an elective course. **Szyld** called the question. The proposal was **approved by unanimous voice vote**.

**Neville** presented the second reading of the **Double Major proposal** for the Undergraduate Curriculum Committee. The proposal is as follows:

To complete a double major involving two Bachelor's degree programs a student must complete all requirements for both majors, including four discrete courses.

**Reich** asked if there was a CAS history behind the motion. **McMenamin** said that CAS at one time required five discrete courses, but later reduced that number to zero. Interdisciplinary majors makes it too easy to complete double majors without the requirement of a number of discrete courses. **Jansen**, who was chair of the COI, confirmed this. The motion **passed unanimously by voice vote**.

The Chair asked if any member had a position paper on the By-laws to present. None was offered.

### **New Business**

The **Graduate Curriculum Committee** presented the first reading of a proposal for a new M.A. degree program, the **M.A. in Integrative Applied Mathematics**. A copy of this proposal is part of the official copy of these minutes, and can be found on the College website. **Grinberg** presented the program for the Committee. He said that the program was a response from a call by the Provost and the Dean of the Graduate School for innovative, tuition-driven new M.A. programs. The integrative nature of the program allows it to encompass many areas currently of interest in applied mathematics better than specific programs in mathematical finance, imaging, control theory, etc. could. **Dubeck** asked if Finance was appropriately placed in this College, rather than the Finance Department of Fox School of Business. Grinberg said that the courses in this program do not replace any courses taught in the Finance Department. That department wants Mathematics to offer a course in mathematics of finance. The mathematical topics are probability and partial differential equations. **Stafford** asked if there was a business plan. How large would the classes be? Will the program cost the College money? Grinberg said that since the program does not involve the creation of new courses, there would be no new costs. The only new addition would be the co-op program. Dubeck noted that some of the courses required in the program were related to computer programming, and asked if the CIS Department should be offering those courses. Grinberg noted that the courses were in symbolic computation, an area where the Mathematics Department has strength, especially because of the presence of Professor Zeilberger. He stated that there was no overlap between these courses and the offerings of the CIS Department. **Chein** remarked that the courses in the program are variants of courses on the books. For example, the direction of the course Topics in Probability would change. Faculty would be diverted from undergraduate to graduate courses. Grinberg responded that the courses are designed to be accessible to advanced undergraduates. There is no intention to compete with undergraduate courses. **Jansen** asked if we were diluting the offerings to the same group of students or if the program will serve a new population. Grinberg said that the program was intended to attract new students, a substantial number of whom would come with their own funding. Some of those attracted would be the more traditional type of graduate student. With the program in place, it will be possible for the Department to apply for grants in the NSF - IGERT and VIGRE programs. The undergraduate and graduate programs in mathematics are working together toward vertical integration. **Berhanu** pointed out that engineering students would find the program's emphasis on control theory attractive. Stafford asked if the program would be offered in the day, the evening, or at an off-campus location such as Fort Washington. Grinberg said that the program would be initially offered in the day, but might expand to the evening division. There is interest in Chester County. Chein voiced three concerns: (1) students would be siphoned from the traditional undergraduate offerings; (2) the program will need a director, with unspecified prerequisites; and (3) the appended set of CV's contains one that belongs to a non-member of the faculty. **Raymon** responded to point (2), saying that the Graduate Program Director would direct the program, and would not receive additional prerequisites. Grinberg added that prerequisites were not part of the proposal. Responding to (1), he added that the program would add incentive to study mathematics, and would increase interest in mathematics courses generally. As for (3), non-faculty involvement in the program would be limited to the co-op phase. **Lyra** commented that analytic geometry was being ignored by the department. Raymon said that the subject was included in the precalculus course. **Schiller** added that it is included in calculus, too. Berhanu said that the present situation, in which most students earn the MA degree by taking 10 courses and a qualifying examination, was unattractive. This program emphasizes developing skills in important areas, such as symbolic computation, imaging, control theory, and mathematical models involving probability and partial differential equations. **Mihalisin** asked if students who did not have a bachelor's degree in mathematics would be able to enter the program. Grinberg said that the program was two-tiered, and remediation could be required of those who need it. A student coming from industry might have compensating strengths, but still need to take a remedial course or two. It was noted that there were only five copies of the proposal available at the meeting, and the secretary promised to have available copies of an abridged version for the second reading.

### **Approval of the graduate list**

The list of May graduates of the college was approved by acclamation, and is attached to the official copy of these minutes. It may be viewed on the CST website.

### **Discussion of the By-Laws**

The **Chair** reported that the **Executive Committee** had suggested that in response to the defeat of the By-Laws that

either the old By-Laws Committee should reconvene to amend the By-Laws so that they would win approval, or a new By-Laws Committee should be assembled to do this job. **Dubeck** asked what objections the faculty who voted to disapprove had. Chein added that those who voted no should identify the problem so that it could be fixed. **Mendoza** said that his objection was that the By-Laws would weaken the college as a whole by circumscribing the power of the Dean. **Ingargiola** favored a vote in September on the By-Laws in their present form. **Szyld** proposed the following motion:

The Executive Committee shall select a new By-Laws Committee charged to consult the faculty and amend the By-Laws.

**Gawlinski** seconded the Szyld motion. Dubeck asked if each department was represented on the old committee. The Chair responded that each was. **Reich** added that while the committee had one member from each department, the committee could not be said to be representative. **Friedman** spoke against the motion, and reported that in the CIS department, meetings were held to discuss various drafts of the By-Laws. **Berhanu** favored the motion, and observed that while some members of the Committee may have been elected by their departments, others weren't. He was not aware of the process as it occurred. He suggested that each department should elect a representative to the By-Laws Committee. The By-Laws should not cast the Dean and the faculty as adversaries. **Stafford** opposed the motion, saying that the By-laws represent a compromise; any change might disrupt it. **Chein** also spoke against, and explained that each department chair had been asked to select a representative to the Committee. Responding to Stafford, **Schiller** noted that the only compromise in the By-Laws was on the issue of the Promotion and Tenure Committee. Szyld pointed out that the defeat of his motion would not imply that the assembly would vote again on the same By-Laws. The Chair stated that since the By-Laws were defeated, they should be reviewed before another vote was taken. If they had passed, those favoring them would not appreciate a motion to reconsider. Berhanu suggested that each representative should return to his or her department, ask for objections to the By-Laws as presently written and revise them accordingly. Chein pointed out that while some departments had meetings, his department met very infrequently, and that this hindered the discussion of the By-Laws. The Chair noted that no one wished to add to the debate, and a vote was taken. The motion passed, 13 in favor, 6 against.

Dubeck moved that all current committees should remain as constituted until the By-Laws passed. This motion passed unanimously by voice vote and without debate.

## **Adjournment**

The meeting adjourned at 4:05 PM.

Respectfully submitted,

Bruce Conrad