

**The University of Tennessee at Chattanooga
Graduate Council Minutes
October 24, 2002**

Members Present: V. Bumphus, D. Cundiff, D. Edwards, N. Fell, E. Foster, K. Gee, P. Guess, J. Henley, T. Lease, B. Lee, G. Litchford, E. Meagher, J. Mies, D. Pittenger, G. Thibadoux, J. Wakim

Members Absent: G. Bartoo, P. Guess, N. Alp, S. Smullen

Ex-Officio Members Present: Arfken, Delacroix, Orth

Ex-Officio Members Absent: Altfillisch

Guests Present: Roger Briley, Phil Kazemersky, Brooke Kendrick

Actions Taken

- First Reading: Proposal to add N541 to the MSN Anesthesia concentration: 15-0-0.

I. Call to Order and Approval of the Minutes

Dr. Meagher called the meeting to order at 3:15 p.m. Dr. Edwards moved to approve the minutes and Dr. Wakim seconded the motion. The minutes were approved without change.

II. Old Business

Dr. Meagher introduced the old business with a reminder of the SACS visit and gave the floor to Dr. Arfken. Dr. Meagher asked the committee to refer to either the *Graduate Council Manual* or the *Graduate Catalog*. New copies of the manual were distributed. Dr. Arfken told the Council that the SACS team had given her recommendations for two areas: the statement on graduate faculty membership and part of the statement on graduate assistants.

The concern about the statement on graduate assistantships was that the policy was not actually reflective of what was happening. Dr. Arfken pointed out that the area of concern was on page 19 in the *Catalog* or page 11 in the *Manual*. Dr. Arfken said that graduate assistants have always been referred to as instructional assistants that teach phys ed, help with grading, and related activities. They have never been teachers of record at UTC. However, this year, we do have a handful of GAs who are classified as teaching assistants and who are teachers of record. Dr. Arfken has not been aware of this but SACS found it and asked that Graduate Council look at the statement about this policy and clarify what was said in the statement. Dr. Arfken circulated a proposed change to the *Graduate Catalog* that would be consistent with the SACS Criteria for Accreditation. Dr. Arfken proposed that paragraph 6 on page 19 of the *Graduate Catalog* be replaced with the language in the handout. Secondly, she said that SACS asked where in the *Catalog* was the statement on the Policies and Procedures for Graduate Assistants. To be fair, she stated that it had never been in the *Catalog* but it was in the *Manual* on pages 11-12. Dr. Arfken proposed that a new subheading stating policies and procedures be added at the end of the section about graduate assistants.

Dr. Cundiff asked specifically about the AT/HHP program and questioned their use of GAs as physical education instructors. Dr. Arfken stated that the use of GAs in that program was

appropriate; even though these GAs are the instructors of record, the nature of the courses that they teach are appropriate. Dr. Arfken stated that SACS had problems with GAs teaching courses that were not skill based, activity courses or labs. She gave the example that GAs are teachers of record for English composition courses, a situation which is inappropriate. Dr. Cundiff asked if the statement applied to all GAs. Dr. Arfken said that the language could be amended while still in keeping with the nature of SACS standards. Dr. Arfken suggested that the line in her proposed change stating, "They may NOT be teachers of record" be removed. Dr. Cundiff suggested instead that an exception statement be included that would specify when GAs could be teachers of record, as in activity classes. Dr. Meagher asked Dr. Cundiff and the council for recommendations on how to word this portion of the statement. The Council agreed to add the statement "except where SACS specifies otherwise" to the end of the last sentence in the first paragraph of the recommended change.

Dr. Pittenger moved to approve this change and Dr. Litchford seconded the motion. The proposal was approved 14-0-0 with no further discussion. This matter will be submitted to Faculty Council for approval. Dr. Arfken asked if a second reading would be required, since the change was not curricular in nature. Dr. Meagher responded that she did not think a second reading would be necessary.

The second item that SACS brought to Dr. Arfken's attention concerned graduate faculty membership. Dr. Arfken told the committee that she felt this one came about as a mistake on SACS' part but the Council had an obligation to review it nonetheless. In the *Graduate Catalog*, the graduate faculty listing is indexed to page 108. On page 108, the listing of the members begins. SACS objected to the fact that none of the criteria for membership were listed, but as Dr. Arfken pointed out, the criteria are in fact listed on page 107, but not indexed. Dr. Arfken did not think that SACS looked at the manual, which also includes the criteria. SACS recommended that Graduate Council provide a fuller description and criteria for graduate faculty membership. Dr. Arfken noted that criteria are listed on pages 24-26 of the *Graduate Council Manual*.

Dr. Edwards asked if there was any way to ask SACS to check again and see if they missed it. Dr. Arfken said that she believed they missed it but it would not be appropriate to ask them to do that because UTC has already been chastised in the past for arrogance. Dr. Arfken simply asked the Council members to use their wisdom and recommend how to proceed. Dr. Henley stated that they did use the term "fuller," which implied that something might be lacking. Dr. Meagher pointed out that not everything from pages 24-26 in the *Manual* was included in the *Catalog* on page 107, so she suggested that everything in the *Manual* be added to the *Catalog*, thus supplying a "fuller" statement. The section on designation, continuation, and appeal was specifically noted as being absent in the *Catalog*. Dr. Pittenger moved two actions: first, ensure that the *Graduate Catalog* be properly indexed in the future; and second, that the Council empower the Dean to make changes to the *Catalog* in the future to fulfill criteria required by SACS. Dr. Gee seconded these proposals. The motion passed 15-0-0.

Linda Orth asked if the council really wanted to include the ¾ time assistantships in the description, as we have removed those from the application and do not technically offer them anymore. Dr. Arfken said that The Graduate School does have one or two of these left that are used by one of the larger Colleges.

III. New Business

A. Proposal to add N541 to the MSN Anesthesia concentration

Dr. Meagher introduced this issue and Dr. Wakim referenced the proposals that were distributed at the beginning of the meeting. Dr. Wakim explained that the School of Nursing would like to reactivate N541 as well as decrease the content and credit hours from 3 hours to 2 hours. The material covered in the class is covered on the national exam for nurse anesthetists and though the content has been inserted into the clinical course, this inclusion has not turned out to be feasible. Therefore, the School of Nursing would like to reinstate this course. It has been taught in the past 18 months as part of the Anesthesia certificate program.

Dr. Cundiff moved to approve this proposal on the first reading; Dr. Foster seconded. Drs. Litchford and Meagher asked that the department work on proofreading and editing the proposal before the second reading by the council. Dr. Litchford specified that they look at the rationale section. Dr. Meagher informed the council that all signatures had been obtained for this proposal. The proposal was approved 15-0-0.

B. Recommendation for Graduate Faculty Membership

Dr. Meagher introduced the recommendations from the membership subcommittee whose members are Drs. Cundiff, Lee, and Wakim. A summary of the recommendations for membership was passed out to the council. All three members have reviewed this first round of applications for the 2002-2003 academic year. Prof. Gee noted that one of the COBA faculty was listed incorrectly as CEAPS faculty. This error was noted. Dr. Arfken stated that no one had been informed yet because these recommendations are just the first step. The recommendations must go to the Provost as well. Dr. Cundiff noted that the subcommittee had changed some of the requests from the original applications but any changes would not affect the faculty's ability to teach in their departments. Dr. Litchford moved to accept the recommendations and Dr. Pittenger seconded the motion. The recommendations were accepted 15-0-0.

C. Introduction to Computational Engineering

Dr. Kazemsky introduced Dr. Roger Briley who is joining us from Mississippi State University as part of a team that is establishing the Computational Engineering Ph.D. at UTC. Dr. Kazemsky noted that Dr. Briley is also associated with the UT SimCenter in Chattanooga. This research base is being established at the old TVA solar complex. He noted that Dr. Briley is part of a group of approximately 15 faculty that will be coming to UTC, some of whom will be faculty within the College of Engineering and Computer Science and some who will be research professors. He stated that UTC and the College are excited to have them because of the outstanding programs that they run. Dr. Kazemsky stated that Dr. Briley was here in part to give the Council an overview of what he and his colleagues do and to help in explaining a forthcoming proposal for a concentration in Computational Engineering at the Master's level. This concentration will hopefully accommodate students who are interested in the future Ph.D. program.

Dr. Briley thanked the committee for having him and passed out a handout geared at explaining the SimCenter as well as Computational Engineering as a field. Dr. Briley began by explaining that the SimCenter was originally an outgrowth of MSU's Engineering Research Center. The National Science Foundation has a national program that establishes ERCs and there are about 15-20 national centers currently. There is strong competition to acquire one of these centers; they have substantial funding attached to them. Dr. Briley stated that engineering as a field has a culture of individualism that the NSF would like to see

change and this is part of the motivation for the development of ERC facilities. The NSF has put programs in place that are meant to steer researchers away from individual, autonomous research and towards a culture that embraces strategically planned and focused cross-disciplinary research and education. ERC's are designed to solve problems among disciplines that no researcher in one discipline could solve on his own. These are funded for 11-year cycles and the NSF very closely reviews them.

The ERC at Mississippi State University went the full cycle and the overarching focus was on computational field simulation through the use of engineering, computer science, and mathematics. Dr. Briley stated that it is very difficult in any institution to conduct cross-disciplinary research efficiently but his team at MSU worked very hard over the 11 years to do this. Those faculty who were successful in changing their research and teaching styles eventually became a part of the SimCenter. Dr. Briley then stated that he believed that this style of research is the way of the future and that he and his team are optimistic about establishing and growing the program here.

Dr. Briley explained that the SimCenter would conduct integrated research using computer tools to solve real world problems for government and industries. The benefit of the center for UTC is that it allows faculty and students to work on multiple projects and to solve engineering problems that create solutions that are practical and innovative. An added value for graduate students in the program is that they will be able to gain experience working in cross-disciplinary teams; this gives them an advantage over graduates from traditional research institutions when they are seeking employment in industry.

Prof. Delacroix asked how many computational engineering programs exist in the country. Dr. Briley answered that the first program began at Mississippi State and it is 12 years old. He noted that the University of Southern California has just started a similar program and that there may be one other but the program at MSU really did break new ground. However, the field of computational engineering is gaining support and interest because of its unique approach to research. UTC will be the third program of this kind in the country. Dr. Kazemsky added that this area opens up a new aspect in engineering because computer models allow researchers to run experiments over and over without the cost that has traditionally been associated with solving problems involving air, land, sea, and space. He used the analogy that the car industry generates computer models for crash testing now because it is safer and less expensive but the simulation can be manipulated in numerous ways, potentially yielding more fruitful outcomes.

Dr. Lease asked what sorts of proposals the council would be seeing from this program. Dr. Briley answered that the College was completing the draft of the proposed concentration in CME at the master's level and then hopefully the establishment of the Ph.D. program would be expedited such that students would begin here in the fall of 2004. Dr. Briley said that at the present time, 5-6 students still remain at MSU that will most likely move in addition to the faculty. These students will continue to be able to work towards the Ph.D. in the meantime by going through UTK's Engineering Science degree. Dr. Briley said that this program was loose enough in curriculum to allow the students to do the kind of work they have been doing at MSU. Dr. Briley stated that with the decentralization of the UT system, he hoped to be able to transition to Chattanooga easily. Until the program here is officially up and running, the faculty hope to work with UTK and in Tullahoma. Dr. Litchford asked how they planned to accomplish this interface. Dr. Briley answered that he was not sure yet how the relationship would go but at the time being the concern lies mostly with UTK.

Dr. Lee asked for more clarification on the computational aspect of this proposed program. Dr. Briley used the analogy that if the applications at the SimCenter were music, they would simply be using computers to create it. He explained further that the computational aspect has to do with mathematical representations of a relationship or effect. Researchers seek out the representation that best describes the physical world and then solves the model using computers.

Dr. Fell asked if the program at MSU was closing or if we would be competing with them for students. Dr. Briley answered that MSU is not very happy that the majority of the SimCenter faculty are leaving but circumstances there were partially the cause for the move. Dr. Briley continued that the program at MSU shouldn't close because the SimCenter is not the entire degree program but rather the group of faculty who succeeded in working together in the team research structure. Dr. Briley stated the MSU has strength left in some individual researchers and that some of the SimCenter faculty haven't left and may not leave. MSU's program may turn out to be competition in terms of recruiting but generally the structure of the programs will be quite different.

Dr. Lee asked about intellectual property and how that might be addressed as the faculty moves from one institution to another. Dr. Briley agreed that it was a difficult issue but the SimCenter was largely funded by the NSF and the government so technically all the products of research coming out of the SimCenter is the property of those agencies that funded it. Dr. Briley suggested that if the government wanted more work done in the future, it could obtain the programs or information from MSU and give it to Dr. Briley and his colleagues. Dr. Briley also added that the software is not the most important part of the equation but rather the people who design it and use it. He said that since most of the group that was working at the MSU SimCenter will be moving here, so the knowledge base will not be lost. Dr. Briley concluded his presentation by informing the council that he and his colleagues are very excited to be at UTC and are looking forward to developing the next generation of computer software here.

Dr. Meagher thanked Drs. Briley and Kazemersky for coming and informing the council about this exciting new program.

IV. Other Matters; Adjournment

Dr. Meagher asked the Council if there were any announcements or other matters to be addressed. Seeing none, Dr. Pittenger moved that the meeting be adjourned and Dr. Litchford seconded. The meeting was adjourned at 4:05 p.m.

Respectfully submitted,

Brooke Kendrick
Graduate Assistant
The Graduate School