Minutes of the Graduate Faculty Council Meeting

Tuesday, January 19, 2010

1) Meeting called to order at 4:05 pm.

Members (15): Bill Yarroch (ASE), James Pickens (SFRES), Renfang Jiang (Math), Blair Orr (Peace Corp), Beth Flynn (HU), Amy Marcarelli (Bio Sci), Steve Seidel (Comp Sci), Chris Middlebrook (Elec & Comp Eng), Ruth Archer (Bus & Econ), Seth Donahue (Bio Med), Gerard Caneba (Chem Eng), Sam Sweitz (Env Policy), Jim Hwang (Materials Sci), Craig Friedrich (MEEM), Kim Fook Lee (Physics), Greg Waite (Geo)

Guests (5): Heather Suokas (Grad Sch– recording secretary), Nancy Byers Sprague (Grad Sch), Jim Diehl (GMES), Jim Frendewey, (SOT), Guy Hembroff (SOT)

2) Review and approval of 12/01/09 meeting minutes.

3) Old Business
   a. Graduate Certificates Proposal (B. Yarroch): The Senate Curricular Committee has not yet acted on this.
   b. Graduate Certificate in International Profile Proposal (B. Orr): Waiting on the decision from the Senate Curricular Committee in regards to the graduate certificates proposal.
   c. Graduate Program Review (J. Huntoon): No new report.

4) New Business
   a. Master’s Program Security and Medical Informatics (G. Hembroff & J. Frendewey): This is a natural progression for the School of Technology. Previously the SOT offered associate degrees exclusively (last associate program ended in 2005) and that has changed and moved on to offering only bachelor’s degrees. The entire faculty hired in SOT are PhD candidates. The school has changed a lot over the years and is continuing to change. The medical informatics proposal fits in well with the SOT’s capabilities. The current area that SOT has in relation to this informatics proposal is the undergraduate computer network systems administration. A lot of the research in the school of technology is imbedded into the medical informatics field. The department of labor is saying, in terms of labor statistics, that there will be an eighteen percent increase in medical informatics until 2016 which is the biggest increase in all job employment in the United States. SOT is capable of taking the next step and propose this master’s program. To add validity to the program SOT is partnering with Marquette General Health System, which is a teaching hospital and is facilitated through Michigan State University. There will be two classes each semester that will be instructed from Marquette General. This is all part of the distance learning initiative they are using to structure this particular graduate program. The SOT feels there is a lot of research potential in this area. G. Hembroff then went on to address the comments made during the December GFC meeting (see meeting minutes on the GFC archives page). This is not a database network administration program. See the handouts section on the GFC website to review the definition of medical informatics. The handout details what medical informatics is, what types of research will be accomplished and some current articles from the Journal of American Medical Informatics Association. The program will deal with different types of structuring of data and different types of components of data. The prerequisites have been modified and the modified proposal is found on the
handouts section of the GFC website. In regards to the substitutions (whether or not other courses within departments/programs other than SOT can be taken instead of the proposed listed courses) – yes, this is a possibility. One thing they had to look at when considering this is whether or not certain components (what is taught from a health care decision making process) are imbedded into the possible substitution courses. One possibility is the TSMI5161 (database management and security) being substituted with CS4421 (database systems). Another possibility is TSMI5221 (protocols and systems for internet and web security) to be substituted with EE5723 (computer and network security). S. Siedel passed out a handout (can be found on the handout section of the GFC website) that includes comments that were addressed above. It also includes examples of overlaps. Which staff at Marquette General will be instructing the distance learning classes? If the proposal is passed then those decisions will be made. One instructor will be hired to teach the four courses. Differences between the Medical Informatics program and other programs on campus will need to be clearly defined. Will there be any commuting to Marquette General? No, this is an online distance learning program. Research options (Plans A, B, or C) are still being decided on. Distance research is more time consuming and more difficult. Why is this a master’s program as opposed to a bachelor’s program? The work that is being done in terms of the research components are done at a graduate level. The knowledge needed for the courses would make it unfair to put it at an undergraduate level. G. Hembroff has documentation regarding how to classify what constitutes adequate education for someone involved in medical informatics or security. What distinguishes this program as science rather than arts? The content of the courses and research is more from a science and math perspective rather than arts. It also deals with a high level of security content. Most master’s programs at Tech have bachelor’s programs behind them. This doesn’t have a specific bachelor’s program behind it. The proposal does not list a specific bachelor's degree needed to enter this course. The proposal states that the online courses will average five to six students per class. How is this cost effective? There are both degree seeking and non-degree seeking students who can take these courses and they anticipate thirty to forty students. The target demographic for this program are individuals from computer science, computer engineering or information technology. The proposal needs to address the above concerns before this is sent to the Senate. The proposal will be revised and brought back to GFC on 2/2/10.

b. Proposal to Modify the “Senior Rule” Policy (N. Byers Sprague): The proposed name for this revised policy is “Integrated Undergraduate/Graduate Degree Programs.” The goals are to allow individual departments/programs to offer integrated undergraduate/graduate degree programs, attract Michigan Tech bachelor’s students into the master’s programs, allow students an early opportunity to become engaged in graduate-level research, allow students to pay undergraduate tuition for a limited number of credits taken while an undergraduate student and apply these credits toward a graduate degree and finally allow students to double count a limited number of credits towards both the bachelor’s and master’s degree. The current policies along with the above goals are detailed in the handout section of the GFC website. This is an expansion on the current policy. Clarify “graduate credits.” Does this mean graduate level credits or credits applicable to a graduate degree? Applicable credits because they do not need to be 5000 level credits. Does this have to go to the Senate? The dean will answer this question. Will this affect the MIGS transfer students? No, this is strictly for Michigan Tech students who are getting an undergraduate degree here. In regards to the text “In most situations, this means that a student may accumulate a maximum of ten credits as an undergraduate that can later be applied toward the graduate degree,” the proposal needs to clearly state that each department/school may set lower maximum allowable
credits. Another issue is that research credits can be counted toward the graduate degree as an undergraduate. Something needs to be inserted stating that research credit will not count towards the master’s degree or at least only a small portion will count towards the master’s degree. This could possibly be done as a “special topics” research course or directed study. N. Byers Sprague will bring these issues to the dean of the Graduate School. The proposal will be revised and brought to the February meeting.

c. Proposal for Geophysics PhD Program (G. Waite): This is a program that already exists but does not have a name. There are no new costs because this is an existing program. The department was offering Geophysics degrees under the guise of another program. They have well equipped laboratories to accomplish the Geophysics research. They have one of the best paleomagnetics labs in the United States. This program will help recruit and retain students. Call for a vote to approve and move to the Senate. Unanimous vote to approve.

5) Next meeting will occur on the first Tuesday in February (2).

6) Motion to adjourn at 5:08 pm.