MATERIALS SCIENCE AND ENGINEERING PROGRAM
Faculty Meeting Minutes
September 12, 2011

PRESENT:  Aindow, Alpay, Burkey, Brody, Carter, Gao, , Hebert, Kattamis, Marcus, McCrackan, Ramprasad, Rossetti, Shaw, Singh and Wei.

EXCUSED:  Maric

SABBATICAL:  Huey

1. The meeting was called to order at 11:06 AM.

2. The minutes of the April 11, 2011 meeting were approved as written.

3. Review of Action Items (All):
   a. Rampi: Contact ME Dept regarding their 5th year Master’s Program. Continued.
   b. a-k Committee Chairs: Schedule meeting and invite Hal. Completed. To be discussed later.
   c. a-k Committees: Review course material and submit report. Completed. To be discussed later.
   d. Capstone Design Advisors: Email final presentations to Hal. Completed.
   e. Barry, Pamir and Mark: Meet to discuss moving application deadline to an earlier date. Continued. To be discussed during future Graduate Committee meeting.
   f. Barry: Meet with Leon and the UG committee to discuss W and Lab courses. Continued. To be discussed during future Undergraduate Committee meeting.
   g. All: Speak to seniors enrolled in courses to obtain feedback on 1-credit seminar course. Continued.
   h. All: Email suggestions for seminar speakers to Barry or Leslie. Completed.
   i. Barry: Meet with faculty members who have new course assignments for Spring 2012. Continued.

4. Review of Department Activities:
   a. Fees for Lab Courses
      (1) Dan and Barry have been discussing the introduction of fees for CHEG undergraduate lab courses and now would also like to include MSE lab fees when submitting forms to the University.
      (2) Barry reported that the Dean had suggested that all SoE Departments file a request for lab fees for undergraduate engineering lab courses.
      (3) He further stated that he had been told there is a cap of $75 per course.
      (4) Mark inquired if the Dean would be passing on these resources to the departments.
      (5) Dan replied that he had just spoken to Marty and the cap is now set at $100 per year per student and that most of the funding would be passed on to the departments.
      (6) Barry stated that our labs have real costs associated with running them so he and Dan are still having a discussion with the Dean about distribution of the funds.
   b. Student Scholarships for Research
      (1) Barry reported that he and the chairs of the CHEG & MSE Program Undergraduate Committees had mailed letters to all undecided students during the spring 2010 semester that guaranteed a paid research position.
      (2) If they maintain a 3.0 GPA and were admitted to one of our programs, the department guaranteed them a paid position working in a research group for their sophomore year.
      (3) These students were admitted as freshmen during the Fall 2010 semester and are now sophomores.
(4) The Department will subsidize up to 10 hours/week for 1 year only; this “scholarship” was only offered to the freshman class of 2010.

c. **PTR Committee**: Barry announced that the votes were tallied; Pamir, Hal and Mark had been elected as representatives to the MSE Program PTR Committee.

5. **Undergraduate Issues, Senior Design:**
   a. **Research Lab, Writing and Senior Design Course Proposals:**
      (1) Leon reported that the UG committee was researching different proposals for several of the MSE lab courses as well as the senior capstone courses.
      (2) Barry expressed concern with the significant increase in student enrollments, especially with Don Potter’s course; a different plan from the current is needed.

   b. **Open House**: Rainer announced that faculty and student volunteers were needed for the September 18th Open House from 10AM through 1PM.

   c. **Senior Design Projects:**
      (1) Hal reported that he had emailed the list of projects available for this year.
      (2) There are approximately 7 projects that still don’t have assigned faculty advisors and asked for volunteers.
      (3) With the change in ABET- assigning the Senior Capstone course as a gateway course – there is a need to modify the course requirements for a student to pass the course.
      (4) Students will now have additional requirements for ABET for passing – need preliminary results and broader impact statement for first semester requirements.
      (5) Hal also stated that in the future, all students needed to start their projects (MSE 4901) during the fall semester, unless there were special circumstances.

   d. **ENGR 1000**
      (1) Pamir stated that at least 50% of our students are recruited as the result of this course so it is important we continue the various presentations and demos.
      (2) The schedule for this semester’s presentations was distributed.

6. **Graduate Issues:**
   a. **Graduate Committee Team Members:**
      (1) Rampi announced the new members of the Graduate Committee: George, Puxian, Radenka, and Trista
      (2) Rampi is the new Committee Chair.

   b. **Qualifying Exam Committee:**
      (1) A committee was formed to work on this year’s qualifying exam.
      (2) Committee members are: Mark, George, Mei and Rampi.

   c. **Adviser/Advisee**
      (1) Rampi reported that in order to perform advisor-advisee assignments in an efficient and expedient manner, he had e-mailed MSE graduate students and Graduate Faculty concerning the selection of advisers for newly admitted (Fall 2011 Admits) graduate students.
      (2) He urged the students to meet faculty members with research position openings, and get back to him with their top 3 choices of research groups by Sept 30th.
      (3) Faculty members were requested to inform Rampi
         (a) if any student that had spoken with them and were one of their top 3 choices in order of preference;
(b) if they had reached an agreement with a student; or
(c) if no students had approached them.

d. **Previous Qualifer Exam**
   (1) An e-mail had been sent to all MSE graduate students last December requesting that all students admitted to the MSE PhD program prior to Fall 2010 to make a decision to proceed under the new rules or stay with the old rules.
   (2) Rampi e-mailed all graduate students again requesting that they e-mail him with an anticipated date for submitting their written proposal and/or presenting the oral portion of their examination.
   (3) There are 6 graduate students that will be continuing with the old rules and anticipate competing it this semester: Kyle Crosby, Max Villa, Farzana Sharmin, Jessica Woodward, Han Wang, and Christian Ayala.
   (4) Faculty were requested to encourage their students to complete the exam ASAP

7. **Chapters:**
   a. **Materials Advantage:**
      (1) Rainer reported that a new leadership team had been elected in May; the new officers are:
         (a) President: Drew Hires
         (b) Vice-President/Outreach Chair: Brian Becerra
         (c) Secretary: Erica Pehmoeller
         (d) Treasurer/Fundraising Chair: Mike Kek
         (e) Social Chair: Jason Chan
      (2) Pamir announced that Rainer is anticipated to be on sabbatical leave next year and asked for a volunteer to advise the Chapter.
      (3) Rainer stated that a group of the students planned to attend the MS&T Conference this semester. The conference will be in Columbus, OH, October 16-20.
      (4) Barry stated that the department would still cover $250 for any student that presents at the conference.
      (5) Cathy reminded faculty that prior approval was needed before traveling out-of-state, this includes undergraduate students.

b. **MRS:**
   (1) Attendance at Conferences:
      (a) Barry urged faculty to encourage their students to be more visible at meetings.
      (b) He emphasized the need to get all graduate students to attend the fall meeting.
      (c) It is too late for submitting abstracts for the fall but there is still time for submissions for the spring meeting.
   (2) Barry reported that a new Executive Board had been elected: the new officers are:
      (a) President: Ghanshyam Pilania
      (b) Vice President: Vincent Palumbo
      (c) Secretary: Yasemin Kutes
      (d) Treasurer: Kuo-Ting Liao

c. **Alpha Sigma Mu:** No Report

8. **Other Business**
   a. Rampi suggested daily or weekly coffee hours to improve on collegiality and to encourage more interactions between students and faculty.
   b. Rampi also suggested having technical discussions on a regular basis and not just immediately before a proposal is due; discussions should start long before the proposal is due so it is better prepared.
Prabhakar said C2E2 has already initiated something similar to this idea; they have brown bag lunches once a month to discuss research. Harris stated that he was working with Fotis and the VP of Research to start preparing for major proposals a year or 2 ahead. 
(a) He was proposing bringing in external reviewers so we are better prepared for submissions. 
(b) With this new procedure, proposals will go in well documented with substantial back-up rather than being hastily unprepared.

9. The meeting broke for lunch at 11:43 AM.

10. The meeting reconvened at 12:05 PM to begin the ABET-related portion of the meeting.

11. **ABET Opening Remarks and Comments:**
   a. Hal emphasized the need to complete end of semester surveys and submit remarks to be included in ABET course files.

   b. He also stated that the minutes from the last ABET meeting seemed to indicate that the Gateway Course Policy had been passed; Hal was unsure if this was the case and wanted to ensure it was officially approved today.

   c. If the Gateway Course Policy was passed, syllabus for some courses would need to be revised.

12. a-k **Sub-committee Reports**

   a. **Sub-Committee (a)**
      (1) Rainer distributed copies of his report.
      (2) He stated that any of the 4 courses would be appropriate as the gateway course.
      (3) Hal thought 3001 would be the most appropriate as it was the first course taken; if students can’t understand the basic material in this course then they should not be in the program.
      (4) Rainer also suggested a change to the wording of sub-criteria (a) to:
         “The ability to apply knowledge of mathematics, science (including chemistry and physics) and engineering principles to the analysis of materials systems and processes.”
      (5) Rainer moved that the above wording change to sub-criteria (a) be accepted; the motion was seconded by Pamir and unanimously passed.

   b. **Discussion of Gatekeeper Course Concept:**
      (1) Hal stated that if faculty agreed to designate the gatekeeper course concept for each outcome then syllabi for all gatekeeper courses must be updated.
      (2) Syllabi for all gate way courses must include that students must pass certain criteria or will not pass the course. Students must be aware of this requirement at the start of the course.
      (3) Mark moved that the Gateway Course Policy be accepted; the motion was seconded by Rampi and unanimously passed.
      (4) The TASK assigned for each subcommittee is to identify a gate way course and exam question in that course.

   c. **Sub-Committee (b)**
      (1) Pamir reported that both Terry Hennessey and Leon Shaw were no longer members of the sub-committee.
      (2) The committee now consisted of Don, Rainer, Hal and Pamir as chair.
      (3) It was decided to drop 2053 and 3055 as “blue” courses.
      (4) 4003w has been added as a blue course.
(5) 3056 will be designated as the gateway course.

d. Sub-Committee (c)
   (1) Leon reported for the sub-committee. (Rampi is chair but was on sabbatical for the year.)
   (2) He stated that questions from 4004 and 4005 had been selected.
   (3) 4901/4902W will be designated as the gate keeper courses.

e. Final Comments:
   (1) Hal requested that sub-committee chairs submit written reports to Cathy;
   (2) The remainder of sub-committee reports will be presented at future faculty meetings; time will be allowed to schedule presentations for 3 reports per meeting until completed.
   (3) Hal suggested that the next ABET meeting be scheduled in 6 months to prepare for the test run.

13. The meeting was adjourned at 12:58 PM.

**ACTION ITEMS:**

1. **Rampi:** Contact ME Dept regarding their 5th year Master’s Program.
2. **Rampi/Graduate Committee:** Meet to discuss moving application deadline to an earlier date.
3. **Leon/Undergraduate Committee:** Discuss W and Lab courses.
4. **All:** Speak to seniors enrolled in courses to obtain feedback on 1-credit seminar course.
5. **Barry:** Meet with faculty members who have new course assignments for Spring 2012.
6. **All:** Contact Rainer to volunteer for September 18th Open House.
7. **All:** Contact Hal to volunteer as an advisor for any of the unassigned Senior Capstone Projects.
8. **All:** Inform Rampi if any newly admitted graduate student were one of their top 3 choices; if they had reached an agreement with a student; or if no students had approached them.
9. **All:** Encourage graduate students that need to complete “old” qualifier exam to complete it ASAP.
10. **All:** Contact Pamir to volunteer to advise the Materials Advantage Chapter.
11. **a-k Sub-Committees:** Identify a gateway course and exam question in that course.
12. **a-k Sub-Committee Chairs:** Submit written reports to Cathy to file with ABET documentation.

**UPCOMING MEETING DATES:**

**MSE FACULTY MEETING:** October 10th @ 11AM, IMS-147A
**CMBE FACULTY MEETING:** TBD
**GRADUATE SUBCOMMITTEE:** November 7th @ 2PM, IMS 147A
**UNDERGRADUATE SUBCOMMITTEE:** TBD