Council of Graduate Coordinators and Staff (CGCS) Meeting

November 5, 2007
Agenda

- Graduate Forms Revision Committee Report
- Graduate Catalog Revision Committee Report
- Chancellor’s Fellowship Allocations
- Top 10 Reasons to choose <your> graduate program
- Graduate Workshop Series
- Q&A
Report from Graduate Forms Revision Committee

- Meets Mondays (for 6 weeks)
  - Wendy Berkelman, Systems Engr.
  - Dawn Davis, Computer Science
  - Rakesh Gudavarthy, PhD Student
  - Greg Hilmas (Denise Eddings), MSE
  - Bruce McMillin, Computer Science
  - John Seguin, Library
  - Raj Singh, MS Student
  - Laura Stoll (Julie Parker, Jennifer Thorpe), Registrar’s Office
  - Venkat Allada, Roberta Cox, Vicki Hudgins (Chair), Office of Graduate Studies

THANK YOU!
Milestones

- Redesigned Graduate Forms 1, 2, 3 & 8
- Working toward a non-signature Thesis/Dissertation Title Page
- Remove Form I-A ??
- Propose an instructional “How To” page to explain “How To” fill out the forms.
- We are moving toward clear, concise, and simplified forms and form processes.
The Process

- Diverse team structure (students, staff, faculty, Registrar, Library)
- Benchmarked other institutions (e.g., RPI, Mizzou)
- Using the expertise we have on the committee

Desirable Form Characteristics

- Easy to fill out
- Easy to administer
  - Tool for advising
  - Official document
- Concise
- Clear (How To Instruction Sheet)
Concept Forms

- **Form 1** – Proposed Program of Study for Master of Science/Engineering
- **Form 2** – Thesis Approval & Report on Examination for Master’s Degree
- **Form 2ME** – Oral Presentation & Report Completion for Master of Engineering Degree
- **Form 3** – Report on Comprehensive Examination for Master’s Degree (Non-thesis)
- **Form 8** – Dissertation Approval & Report on Final Examination
Report from Graduate Catalog Revision Committee

- Meets every Friday @ noon for 6 weeks, first meeting 10-19-07
- Mohamed Abdel Salam, Faculty
- Venkat Allada, Graduate Studies
- Sasikiran Burugapalli, Student
- Krista Chambers, Graduate Staff
- Cihan Dagli, Faculty
- Richard DuBroff, Faculty
- Vicki Gibbons, Graduate Staff (Chair)
- Vicki Hudgins, Graduate Staff
- V. A. Samaranayake, Faculty
- Laura Stoll, Registrar

Brand New to the Committee
Kate Drowne, Faculty & Director of Writing Center
The Revision Process

Desirable Features for Graduate Catalog

1. Clarity
2. Consistency
3. Flow

Selected universities for benchmarking our catalog. Each member assigned a university to review for best practices to incorporate in our revised document.

- Cal Tech
- MIT
- GA Tech
- RPI
- IIT
- Colorado School of Mines
- Stanford
- Stephens
- Virginia Tech
Progress to date

- Reviewed pages 15-21 of Graduate Catalog
- Identified areas that should be included in catalog
  - Add verbiage regarding existing students applying for a graduate certificate.
  - Chart of Dept GRE/GMAT & TOEFL scores
Milestones

- Submit “issues” related to Admissions & Academic Program Procedures section of the catalog to Graduate Council on November 16

- Spring 2008 begin updating information on remaining sections of catalog.

- Committee and sub-committees to develop templates for departmental use

- Intent is to eventually have small focus groups of students to review our revisions and will take into consideration their input on clarity, consistency and flow

- Mid-April 2008: Submit revised graduate catalog to graduate faculty for review and feedback.
Challenges

- Difficult to edit trying to incorporate seven/eight reviewers with different styles of writing and diverse viewpoints within a short period of time.

- Defining new Table of Contents

- Would appreciate comments/input. Any ideas on 1st 30 pages of catalog, please contact Vicki Gibbons.

- A bunch of thanks from Vicki!
Top 10 reasons to consider graduate studies @UMR
Graduate studies in Biological Sciences

- Our degree prepares students for “bigger-better” things.
- Students participate and present at Nat’l and International conferences.
- The Ozarks provide numerous recreational opportunities.
- We have graduate mentors that personally care about the students.
- Graduates have access to be involved in interdisciplinary research.
Graduate Studies in Chemistry

- We offer collaborative inter-disciplinary research areas.
- Our chemistry faculty members are research-oriented and comprise one of the highest external research grant revenue-generating departments at UMR.
- The department is one of only six chemistry departments in the USA with a Coatings program of international reputation.
- We have a 100% success rate in placing students into jobs.
- Our alumni include world-renowned scientists and entrepreneurs.
- The department offers a full complement of teaching, research, and instrumentation laboratories available for use by students and researchers.
- The department has an excellent reputation and is highly recommended by industrial and academic institutions.
- The graduate program includes most areas of chemistry with special strengths in bio-analytical and environmental studies, materials and polymer science, surface coatings, inorganic chemistry, and spectroscopy.
- The chemistry faculty have been honored many times nationally and internationally for their research and teaching.
- Students have the opportunity to participate, side by side with leaders in their field, in cutting edge research work.
Graduate studies in Civil Engineering

- We are a nationally ranked graduate school
- We have top rate faculty
- Our faculty are currently active in research and publications (check out our web site)
- The graduate program is small—allowing for individual attention
- We CARE
- Our reputation speaks for itself
- We are located in Rolla, close enough to St. Louis and Columbia for a weekend visit, but not too close as to distract a student from his/her studies
- The cost of living in Rolla is low
- We have a nice international student body, which will enrich your educational experience at UMR
- Good value for your money
Graduate studies in Engineering Mgt.

- **Broad Perspective** - Engineering Management is a broad technical field. Students with a background in engineering or physical science can expand their management capabilities while enhancing their technical expertise.

- **Faculty Expertise** - The Engineering Management faculty members have a strong combination of formal education from well respected universities and relevant industry experience. Several faculty members are certified in Six Sigma and Project Management.

- **Involvement in "Real World" Projects** - Faculty members involve students in applied research. Support from grants and research contracts are often available to qualified students. Ongoing research is being funded by NSF, Department of Energy, U.S. Military, and industrial companies such as General Motors.

- **Funding** - Graduate students are eligible for Chancellor's Fellowships and Department Assistantships.

- **Student Diversity** - Graduate students come from all areas of the world with a variety of technical backgrounds. Students exchange ideas and issues with a mixture of working professionals through our distance education program.

- **Certificates** - Graduate students can earn certificates in Engineering Management, Project Management, Financial Engineering, Leadership in Engineering Organizations, Military Construction Management, and Project Engineering and Construction Management which can be used towards a graduate degree.

- **Course Flexibility** - Most of our graduate courses are taught on-campus and via distance education. If you miss a class because of travel for work or illness, you can watch the class later over the Internet.

- **Professionally Active Faculty** - Faculty members serve as officers and on boards of directors, as well as on many committees and task forces, in national, regional and state leadership roles in the profession.

- **Student Organizations** - The opportunities to present papers, attend conferences and professional meetings and interact with people in the field complement graduate study. These include ASEM, IIE, SME, ASQ, FEA, and Epsilon Mu Eta the department honorary society.

- **Department History** - The field of Engineering Management was founded at UMR. We are the oldest, largest, and best known Engineering Management Department in the world. The American Society for Engineering Management (ASEM) was also founded here.
Graduate studies in IST

- High demand as business analysts
- Can tailor this degree
  - Four required courses
  - Take theory-oriented courses or practical technology courses
- Concentrations in very high demand
  - Enterprise Resource Planning (ERP)
  - Human-Computer Interaction (HCI)
  - Project Management (joint with Engineering Mgt)
  - Data Warehouses
- Can be completed via distance
- Can be completed part or full time
- Can be thesis on non-thesis
- High demand for technically competent people in businesses
- Graduates have been very successful
  - Relatively high starting salaries
- Several key faculty with extensive real-world experience to share
- LITE Laboratory for HCI research
- Extensive use of Computer Learning Centers for classes
- Use of professional quality software: SAP, Oracle, Dreamweaver, etc.
Graduate studies MBA

- Degree needed to move up in organization
- Technology focus
- Integration of all business areas
- Increase communication skills
- Learn to lead
- Preparation for fast growth
- Most popular graduate degree to engineering
Graduate Studies in Mfg. Engr.

- **The manufacturing engineering reputation**: Advanced manufacturing is one of Missouri’s three distinctive industry clusters, and UMR is Missouri’s primary engineering school. UMR’s research and education in advanced manufacturing are very active.

- **Interdisciplinary curriculum and facilities**: Manufacturing is interdisciplinary in nature. Our curriculum and facilities include manufacturing processes, materials, and management together to provide a comprehensive and practical manufacturing education.

- **Assistantships and fellowships**: Over 95% of our students in Master of Science receive an assistantship or fellowship.

- **Advanced manufacturing curriculum**: A very wide range of courses in manufacturing, including lean manufacturing, CAD/CAM, rapid prototyping, manufacturing management, etc., is available.

- **Co-op and internship opportunities**: After certain courses are completed, many co-op and internship opportunities are available.

- **Small class sizes**: With student-to-teacher ratios much lower than those at other universities, getting personal attention is not a problem.
Graduate Studies in Mfg. Engr. (Distance)

- **The manufacturing engineering reputation**: Advanced manufacturing is one of Missouri’s three distinctive industry clusters, and UMR is Missouri’s primary engineering school. UMR’s research and education in advanced manufacturing are very active.

- **Interdisciplinary curriculum and facilities**: Manufacturing is interdisciplinary in nature. Our curriculum and facilities include manufacturing processes, materials, and management together to provide a comprehensive and practical manufacturing education.

- **Advanced manufacturing curriculum**: A very wide range of courses in manufacturing, including lean manufacturing, CAD/CAM, rapid prototyping, manufacturing management, etc., is available.

- **Flexible Schedules**: All distance courses can be viewed live on the Internet with individual telephone connection at the student’s desk at work, archived delivery on the internet, or archived delivery through file download during day, evening, weekend, or travel.
Graduate Studies in Materials Science & Engr.

- Department has a national and international reputation in both Ceramic Engineering and Metallurgical Engineering
- Outstanding faculty:
  - 16 UMR Faculty Excellence Awards in the last 3 years
  - 12 UMR Outstanding Teaching Awards in the last 3 years
- Student to faculty ratio is low (~6 to 1)
- 98% of graduate students receive some kind of financial support
  - $21,000 per year on average
- Highest research dollars available on campus
- Strong departmental connections with industries
- Jobs in high demand - 95% of graduates have jobs before graduation
- Average starting salaries are high:
  - MS Metallurgy - $54,000
  - Ph.D. Metallurgy - $69,914
  - Ph.D. Ceramic - $76,500
- Wide variety of degree programs to meet your needs:
  - MS & Ph.D. in Ceramic Engineering
  - MS & Ph.D. in Metallurgical Engineering
  - MS in Biomaterials
  - MS & Ph.D. in Materials Science & Engineering
- Excellent professional development opportunities:
  - Travel support to national and international conferences
  - Weekly department seminar series
Graduate Studies in Technical Communication

- A technological university such as Missouri S&T is an ideal environment for a technical communication program. No other technical communication program in Missouri has this advantage.

- Missouri S&T offers excellent opportunities for technical communication students and faculty to collaborate on research projects with people in other disciplines, such as engineering and biological sciences.

- According to a 2005 survey, the median annual salary of U.S. members of the Society for Technical Communication was $68,000 overall and $42,000 in entry-level positions. On the East Coast (MA, NJ, NY) and West Coast (CA), the median salary was more than $80,000 (source: www.stc.org).

- Most of our technical communication courses are taught in a state-of-the-art computer laboratory with the latest discipline-specific software.

- At present, all of our classes are small and personal. Most have between 10 and 15 students in them.

- Faculty collaborate with students on funded research projects that often result in conference presentations and/or publications.

- Some of our graduate students hold teaching assistantships and have full responsibility for teaching sections of technical writing.

- Technical communication is a diverse field that includes translators, writers, illustrators, teachers, managers, etc.

- Technical communicators have such job titles as Web designer, usability specialist, online help developer, documentation manager, and content manager as well as technical writer and technical editor.
Current Distribution of Chancellor’s Fellowships

% By MS/PhD

MS, 40% [27] $103,784.12 waived

PhD, 60% [40] $208,060.96 waived

Source: GTA/GRA/GA Report, created 10/5/07
Registrar’s Office (r_graduate_students_enrolled)
Registrar’s Office (r_umrgpalt_grad_dept_alpha)
Chancellor’s Fellowships (CFs)

How do we allocate CFs for maximum impact?

20 + 10 + 6 Formula
Graduate Workshop Series

“Clear Writing, Successful Proposal” by Kate Drowne (Oct 15, 2007); Approx. 40 people in attendance

Comments:

“Excellent presentation”
“Easy to follow, relevant”
“Very inviting to non-native speakers of English”
“Great information for students and faculty”
“Good presentation –very inspiring!”
Graduate Workshop Series

Upcoming Workshops:

• “The New Age of Academic Success – Scholar’s Mine and Copyright for Academics” presented by John Sequin
  (Nov. 27 @ 2 PM, Civil 125)

• “Thesis Formatting” presented by Vicki Hudgins and Roberta Cox
  (Dec. 4 @ 2 PM, Civil 125)
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CGCS Spring 2008 Meeting Schedule

- January 18, St. Pat’s Ballroom A, Havener
- February 8, MO/Ozark Room, Havener
- March 7, MO/Ozark Room, Havener
- April 11, MO/Ozark Room, Havener
- May 9, MO/Ozark Room, Havener
Q&A

Thanks for attending.