Monday, September 8th, 2014
CEE Faculty Meeting
Welcome
Agenda

1:30 Welcome Back to the Department
1:35 Welcome to New Faculty: Eric Gonzales
1:40 Department Head Discussion
   Calendar
   State of the Department
   Trends in Enrollment, Graduation, Research
   Space Issues
2:00 Comments from the Associate Head
2:15 Comments from the Graduate Program Director
2:30 Adjourn
Department Calendar

Currently Scheduled Faculty Meetings

Fall 2014
Monday, September 8th
Monday, October 6th,
Monday, November 10th
Monday, December 1st

However 2 faculty members can not make these times.
Times with no classes scheduled:  Friday 1:25-2:15, 4:00- 5:00

Times with 1 class scheduled:  MWF 9:05-9:55

Times with labs the overlap:  MWF 11:15-12:05
Department Calendar

September 9th - Freshman Orientation, 5:30 pm
September 15th - College-wide Faculty and Staff Meeting
October 3rd - Advisory Council Meeting
October 9th - Feng Lecture
October 23rd - Career Fair
October 26th - Engineering Open House
October 30th - Tang Lecture
November 6th - CEE Pre-registration
**Department Calendar - AFRs**

**Now**  
https://umacesdweb3.campus.ads.umass.edu/afr/auth/login

**October 20**  
Faculty member completes Sections II-V forwards to DH

**December 1**  
DPC and DH complete Sections VII and VIII and DH returns form to faculty member.

**January 15**  
Faculty member completes Section IX, retains one photocopy and returns original to DH.

**January 15**  
DH forwards original to dean.

**March 8**  
Dean forwards original to Provost. If the dean has made any comments in Section IX, the dean sends a copy of the final page of the form to the faculty member and the department head.

No “new letter” from Provost Katherine Newman yet
State of the Department
New Faculty (CEE), Eric Gonzales

Assistant Professor
Ph.D., University of California Berkeley, 2011
Assistant Professor, Rutgers University, 8/2011-12/2013

- City-scale Traffic Modeling for Multiple Modes
- Design and Pricing of Systems with Cars and Public Transit
- Logistics and Demand-Responsive Transportation Systems

Dynamic Pricing for Cars and Transit
Estimating Network-wide Traffic Emissions
Modeling ADA Paratransit Service Regions
New Faculty (CEE), Boris Lau
Assistant Professor
Ph.D., University of Wisconsin Madison, 2005
Assistant Professor, Baylor University, 2009 - 2013

- Environmental nanoscience & nanotechnology
- Surface/interfacial chemistry
- Role of natural organic matter and biofilm on the fate and transport of colloids

Nanoparticle-Protein Interactions

Precipitation of ZnS nanoparticles in organic-rich settings

Aqueous complexes
Civil and Environmental Engineering

Faculty Activities

• New Faculty - Dr. Eric Gonzales
• Promotions – Sergio Brena, Guoping Zhang promoted

Awards

• Dr. Chul Park awarded the 2013 Paul L. Busch Award
• Alan Lutenegger made a “Fellow” in the American Society of Civil Engineers
• Dr. Behrouz Shafei and Dr. Alice Alipour receive the “2013 Hojjat Adeli Award for Innovation in Computing”
• Dr. Alice Alipour and Dr. Behrouz Shafei receive Editor’s Choice Best Paper Award (2014), Journal of Structure and Infrastructure Engineering, Taylor and Francis
• Dr. Scott Civjan, elected President of the Earthquake Engineering Research Institute, New England Regional Chapter
• Dr. Richard Palmer gives a 2014 Distinguished Faculty Lecture
• Dr. Christopher Ahmadjian - Meritorious Service Award , Dr. Casey Brown – CEE Research Award, Dr. Behrouz Shafei, ASCE Teacher of the Year Award

Noted Research

• Just in - Dr. David Reckhow, National EPA Center for Water Technology, $4.1M for 3 years, NEWIN piloting Center and NSF MRI
• Northeast Climate Science Center funds over $2.5 million in climate science research
• Transportation Center (Regional UTC, LTAP, UMass Safe, MCRP, MTAP …) funds over $2.5 million in research
• Dr. Don DeGroot/Guoping Zhang, CO-PI, NSF Project, $630,000 (UMass Amherst, $330,000)
• Dr. Don DeGroot /Liz Hamlin, CO-PI, $736,707
• Dr. Sergio F. Breña, PI and Dr. Scott A. Civjan, Co-PI received a $174,923 grant from New England Transportation Consortium (NETC)
Civil and Environmental Engineering

Student Activities

• Katherine Lownsbery and Angela Berthaume, National Science Foundation Scholarship
• Scott Steinschneider, University Corporation for Atmospheric Research (UCAR) 2-Year Post-doc
• Cynthia Castro, National Science Foundation Graduate Research Opportunities Worldwide Fellowship
• Alexandra Testa and Michelle Ly, Honorable Mention for the NSF Graduate Research Fellowship
• Joe Goodwill, The Larson Aquatic Research Scholarship
• Jessica Boakye receives “21st Century Leader” and “UMass Amherst Rising Researcher Student Achievement” Awards
• Jing Ding, 2013 Dwight David Eisenhower Graduate Fellowship, Federal Highway Administration and Eno Transportation Foundation Leadership Development Conference Fellow
• Marissa Shea, William F. Field Alumni Scholarships
• David G. Champoux, 2013 Thomas E. Desjardins Memorial Scholarship
• Cole Fitzpatrick, UMass Transportation Center Student of the Year
• Foroogh Sadat Hadjiseyedjavadi, International Road Federation Executive Leadership
• Ameh Fioklou, received the NEAGAP Fellowship
• Ryan McNerney, received the Commonwealth Honors College Research Assistant Fellowship Spring/Fall 2013
• UMass Student Chapter ITS - Northeast Student Chapter of the Year, won the District Traffic Bowl; competed in the Grand Championships in Seattle this past summer
• Kristie Stauch-White received the Boscov Fellowship
• Varun Srinivasan received a Biofilm Summer School Fellowship
• EWB Chapter Raises $25,600 to Support Overseas Projects, travels to Africa
• Curt Harrington, David Burgess, Jonathan Freeman, and Roland Barbeito won the “People’s Choice Award”
• Ryan M. Mones and Sergio Breña received the George D. Nasser Award (PCI)
What do we value?

“Knowledge is the business of the research university: creating knowledge through research, preserving and renewing knowledge through scholarship, transmitting knowledge through teaching and learning, and distributing and applying knowledge in public service.” Craig Calhoun (NYU)

- Teaching – Undergraduate and Graduate
- Scholarship – Peer reviewed publications
- Public Service – Professional organizations

For many of us, scholarship and graduate training requires sponsored research.
## State of the Department

- Students Completing Degrees

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## State of the Department

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Note from Mike Knodler: As of tonight we are at 145 students in ENGIN 111. About 30 or so identify as MIE students.
Graduated Students by Program (During 2013)

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<th>Program</th>
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## Enrolled Students by Program (Fall 2014)

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<th>Program</th>
<th>Total</th>
<th>Masters</th>
<th>Ph.D.s</th>
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<td>Transportation</td>
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<tr>
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<tr>
<td>Structure and Mech.</td>
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## Research Activity

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<th>Year</th>
<th>Proposed</th>
<th>Funded</th>
<th>Expenditures</th>
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<td>$4,308,162</td>
<td>$5,844,541</td>
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<td>2007-2008</td>
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<td>2010-2011</td>
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<td>2012-2013</td>
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<td>2013-2014</td>
<td>$11,048,781</td>
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Research Expenditures by Program, Total (Direct + Indirect) -2013-2014
Students & Research Activity

- Goal: Maintain active, sponsored research activities in all areas to attract outstanding graduate students and retaining them.
- This year we have done a better job of spreading the research load throughout the department, although clearly we can continue to improve.
Other Issues

Promotion Cases

- Guoping Zhang promoted to Associate Professor with Tenure
- Sergio Brena promoted to Full Professor

Searches

- None underway - Comments

Space

- Comments
Other Issues

Department Head Review
- Palmer reappointed to 3 year term starting Sept. 2014

Winter Retreat
- Will ask Program Coordinators to develop list of topics and speakers

Sabbatical Leaves 2015-2016
- Due to DH November 16th (last year), this is for either semester, new information not up yet (posted last year in October).
Graduate Program Director

- Sanjay’s Comments
Associate Department Head

- David’s Comments
Results of ABET Review

- Next report due to ABET July 1, 2019 (6 years)

- The *weakness* regarding phrasing of the Program Education Objectives has been resolved

- Two concerns remain:
  - Facilities: funds already allocated and spent(?)
  - Assessment and Evaluation methods: revised CPI system being implemented
New CPI system

- Thanks to course coordinators for defining CPIs and a-k mapping
- If you are teaching one of these courses:
  - Put the CPIs on your syllabus
  - Collect data during the semester to assess attainment of each CPI (this is the Faculty Assessment)
  - Provide Jodi with the assessment results at end of semester.

<table>
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<tr>
<th>Course Code</th>
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<tr>
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<td>Civil and Environmental Engineering Measurements</td>
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<td>CEE 240</td>
<td>Statics</td>
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<td>CEE 241/A</td>
<td>Strength of Materials &amp; Lab</td>
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<td>CEE 250</td>
<td>Thermodynamics, Heat Transfer and Energy Systems</td>
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<td>CEE 260</td>
<td>Probability and Statistics in CEE</td>
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<td>CEE 486</td>
<td>Civil and Environmental Engineering Design Project</td>
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Implementation of New ABET Assessment and Evaluation System

New System starts Fall Semester 2014:

- New CPI system for CE core courses only
- Survey Revision (Completed)
  - Eliminate freshman survey
  - Revise senior, alumni and employee for consistent questions ABET-related questions and other topics.
- Surveys for 2014
  - Senior (May 2014), Alumni (May 2014)
  - Employers (October 2014)
- Department ABET Committee meets late October
  - Review survey results
  - Review Faculty Assessment results (none for 2014)
  - Review FE exam results
  - Prepare memo to Faculty on results of Assessment and Evaluation
COE Undergraduate Education Committee

- Reconstituted by Associate Dean David Ford
- Representatives from each Department
- Look for events sponsored by the UEC later this fall
- An idea for the freshman experience…
Freshman Experience (trial balloon)

- Create ENGIN 114: specifically designed for first year students who are undecided on the engineering major they wish to pursue.
- ENGIN 114 would be accepted by all departments as a substitute for their ENGIN 11X.
  - Matches current CE practice of accepting many alternate courses to replace ENGIN 111
- Would require resources from each department.
Student Handbook

- We have had two documents:
  - Faculty Undergraduate Advising Guide
  - Student Handbook

- We are moving all of this to the CE web site and consolidating the two documents into one.
Other Items

- Freshman Orientation
  - Tuesday Sept 9; 5:30 Gunness Student Center; faculty introductions at about 5:40

- Jodi needs:
  - your completed syllabus
  - Your Hour Plan
  - If possible avoid scheduling exams during Career Fair

- Dates
  - Career Fair Thursday Oct 23
  - Pre-registration- Thursday November 6, 4-7pm