College of Engineering and Applied Science
Update
Education and Outreach Programs

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Engineering Advisory Council Meeting
19 October 2007
Update:
High School and Honors Programs

• High School Programs
  – Denver School of Science & Technology (DSST)
    • ~60 students in first senior class chose engineering/physical-science emphasis
    • Engineering elective taught by CEAS
  – Lafayette-Centaurus Pre-Engineering Academy
    • 14 (100%) enrolled in CEAS for FA07
    • 4 received I-CUE scholarships

• Honors Program
  – 45 first-year + 24 second-year students
Progress on Recommendations: MEP/WIEP

• MEP/WIEP Spring Event
  – Current and former ADE, and MEP/WIEP directors have discussed
  – Alternative proposals to be discussed in EOC breakout
Progress on Recommendations: Freshman Math Assessment

- Online Freshman Math Assessment
  - 93% of incoming freshmen took mandatory calculus pre-test
  - Of the tested students:
    - 88% ready for Calc 1
    - 10% directed to Calc 1 with Algebra (2-semester sequence)
    - 2% directed to Algebra & Trig
  - APPM faculty report an increase in self-enrollment in appropriate courses
  - Assessment program will continue; need to address students prepared for higher levels
Progress on Recommendations: Biology Core Course

• Biology Core Course for Engineering?
  – Considered in AY03-04 by the College Bioengineering committee
  – Recommendations will be developed in EOC breakout discussion
  – Pending EOC recommendations, an ad hoc committee might be formed
Progress on Recommendations: Rural Engineering and Mesa State 2 + 2

• Rural Engineering Program
  – Funds available for pilot program in AY07-08
  – Western Colorado Math and Education Center (Grand Junction) will coordinate CEAS partnership
  – 3-6 CU students to start in Grand Junction in Sp08

• Mesa State Transfer Program
  – CEAS 2 + 2 transfer program proposal submitted in Su07
  – Revised proposal submitted after Mesa State announced 4-yr engineering program for Grand Junction
  – MSC students will enroll in CEAS after 2 yr
  – CEAS will hire faculty for jr-sr courses
New Initiatives

• On-Campus Capstone Coop
  – Multi-disciplinary/departmental teams
  – Companies invest first-year overhead savings into capstone experience

• First-year freshman “redshirt”
  – Year for underrepresented students to compensate for inadequate preparation

• Center for Engineering Education and Assessment
  – Research in engineering education to complement world-class technical research

• Strategic Plan
  – 10 yrs: Five most important educational objectives?