Campus Conference
2016
FACULTY AWARDS

ROEL SNIEDER, GP:
Society of Exploration Geophysicists
2016 Outstanding Educator + 2016 Beno Gutenberg Medal, European Geophysical Union (EGU)

LINDA BATTALORA, PE:
Society of Petroleum Engineers Rocky Mountain Section 2015 Distinguished Achievement Award

TERRY YOUNG, GP (EMERITUS):
Society of Exploration Geophysicists Lifetime Membership Award

ILYA TSVANKIN, GP:
Society of Exploration Geophysicists Honorary Membership Award

MURRAY HITZMAN, GE:
Society of Exploration Geophysicists 2016 International Exchange Lecturer + Des Pretorius Award from the Geological Society of South Africa + 2016 Haddon Forrester King Medal by Australian Academy of Science

KAMINI SINGHA, GE:
National Ground Water Research and Educational Foundation 2016 Darcy Lecturer

JON LEYDENS, LAIS:
IEEE Professional Communication Society 2015 Ronald S. Bliq Award

HAZIM ABASS, PE:
2015 Society of Petroleum Engineers Honorary Member
ALEXIS SITCHLER, GE:
NSF CAREER Award

GRAHAM DAVIS, EB:
Named GERENS Graduate School’s first honorary professor

PRISCILLA NELSON, MN:
Recognized in Top 100 Global Inspirational Women in Mining, 2015 by Women in Mining, UK

STEVE SONNENBERG, GE:
2016 Honorary Member of the House Award, House of Delegates, American Association of Petroleum Geologists

National Academy of Engineering Exemplar in Engineering Ethics Education Honorees, LAIS:

SARAH JANE HITT
JESSICA SMITH
JUAN LUCENA
JON LEYDENS
Women in Science, Engineering and Mathematics (WISEM) Program and Halliburton receive Women in Engineering ProActive Network (WEPAN)

2016 Women in Engineering Initiative Award
Largest Society of Women Engineers (SWE) Collegiate Section in the United States with over 720 members
Honors Expansion Project

First Year Honors Experience

- Integration and Discovery in Engineering, Arts and Sciences (IDEAS) core course
- Priority admission to McBride
- Themed learning community
- Gateway to other opportunities

inside.mines.edu/MCB-firstyear
94% freshman persistence rate
American Indian Science and Engineering Society (AISES) Student Chapter

Won the top prize at the 2015 First Nations Launch Competition

Hosted by NASA’s Wisconsin Space Grant Consortium
All the cool kids read THE DAILY BLAST

DELIVERED DAILY TO YOUR INBOX DURING THE ACADEMIC YEAR

webapps.mines.edu/dailyblast
Even greater emphasis on new students’ transition to Mines driven primarily by Residence Life, CASA and Student Activities.
Counseling Center created a new triage system for potential crisis and urgent walk-in requests.
In October, Mines celebrates the successful completion of Transforming Lives: The Campaign for Colorado School of Mines.

DURING THE CAMPAIGN, DONORS FUNDED:

- Nearly half a billion dollars invested in Mines
- 10 new faculty positions
- 4 new buildings with the fifth — CoorsTek Center for Applied Science and Engineering — going up now
- An 18% increase in the total number of donors over last year
Fall 2016 Entering Class
1,000 new freshmen
140 transfer students
1,337 avg. SAT / 31 avg. ACT
3.8 avg. high school GPA
28.5% women
52% Colorado residents
5% international students
Fall 2016 Entering Class
118 first-generation students
11 graduates of Mines Summer Multicultural Engineering Training program
36 new Harvey, Boettcher, Daniels and Denver Scholarship Foundation Scholars
50% of new transfer students transferring via articulation agreement
67% increase in new clubs and organizations, allowing for more opportunities for student growth and involvement
Celebrating the 100th anniversary of ROTC
**TARGET POPULATION**

- First year students with poor spatial visualization skills, as determined by PSVT-R pretest.
- Open 5 sections of CSM 151 in mid-July.

**NEW COURSE STRUCTURE**

- Weekly in-class activities support targeted skill (see schedule below).
- Workbook moved to homework (checked weekly as formative assessment).
- Two exams for summative assessment.
- Team research project to explore the importance of spatial skills in a selected course or industry.

**INTENDED OUTCOMES**

- Revised communication and marketing should allow for better identification and participation of the target audience.
- Student performance on PSVT-R should continue to increase from pre to post test.
- End of semester student evaluation results should increase over previous semesters.
- Students should gain a better understanding of the importance of spatial skills to their future courses and careers.
- Students should enjoy and fully participate in the class, and feel that they are learning and truly benefiting from the class.

**Week** | **Topic** | **Activity**
---|---|---
1 | Introduction | Syllabus, expectations, pre-writing, research project focused on group to plan, research project on target audience.
2 | Research project work | Work with group to plan, research project focus.
3 | Combining Solid Objects | Activities: Calc. Applications, Tangrams and Tetris.
4 | Isometric Drawings and Coded Plans | Activity: Building with Snap Cubes.
5 | Orthographic Drawings | Activity: Working with an Ortho-Box.
6 | Inclined and Curved Surfaces | Activity: Ortho-Boxes for Complex Objects.
7 | Flat Patterns | Activity: Working with Paper Patterns.
8 | Cutting Planes and Cross Sections | Activity: Play-doh and Floss Cross Sections.
9 | Exam 1 - 2D and 3D Sketching | In-class exam.
10 | Surfaces and Solids of Revolution | Activity: Drawing Revolved Objects.
11 | Rotation of Objects about a Single Axis | Activity: Connecting Rotations with Ortho Sketches.
12 | Rotation of Objects about Multiple Axes | Activity: Solving a Rubik’s Cube.
13 | Object Reflections and Symmetry | Activity: Fold and Cut Theorem.
14 | Exam 2 - Mental Rotations | In-class exam.
15 | Final presentations | Half the student teams present.
16 | Final presentations | Half the student teams present.
Largest Fall Career Day with 240 companies and 3,447 student attendees
ATHLETICS

RMAC All-Sports Cup
3.139 GPA, 82% grad rate

11 Academic All-Americans
(most ever in a year for Mines)

5 Brechler Awards (given to RMAC teams with highest GPA in their sport)

13 of 16 teams had a 3.0 GPA or above
Traditional halls renovation will conclude end of summer 2016 which completes the renovation or new construction of every residence hall on campus in approximately 6 years.
Growth (quantity) and diversification (quality) of our Housing Themed Learning Communities
Who are your **STARS**?

THE STUDENTS WHO OUTSHINE THE REST?

THE CREATIVE, INQUISITIVE ONES?

THE PASSIONATE ONES?

Encourage your best students to apply for a nationally competitive scholarship or contact the Office of International Programs (OIP) and we will help them apply!

Oppportunities for undergraduates and graduate students
FACULTY AWARDS

CORBY ANDERSON, MME
EPD Distinguished Lecturer Award, The Minerals, Metals and Materials Society

GEOFF BRENNECKA, MME
NSF CAREER Award; Du-Co Ceramics Young Professional Award, American Ceramic Society

EMMANUEL DE MOOR, MME
Outstanding Young Manufacturing Engineering, Society of Manufacturing Engineers; Sydney H. Melbourne Award for Excellence in the Advancement of Automotive Sheet Steel, SAE International and the American Iron and Steel Institute

ANDREW HERRING, CBE
ENFL Distinguished Service Award, American Chemical Society

GEORGE KRAUSS, MME (EMERITUS)
Benjamin F. Fairless Award, Association for Iron & Steel Technology

CASE

DAVID MATLOCK, MME (EMERITUS)
2015 Henry Clifton Sorby Award, International Metallographic Society; Distinguished Member and Fellow, Association for Iron & Steel Technology

JOHN SPEER, MME
Sydney H. Melbourne Award for Excellence in the Advancement of Automotive Sheet Steel, SAE International and the American Iron and Steel Institute

ERIK SPILLER, MME (RESEARCH FACULTY)
Distinguished Member, Class of 2017, Society for Mining, Metallurgy and Exploration

ERIC TOBERER, PHYSICS
NSF CAREER Award

CHESTER VAN TYNE, MME
Fellow, ASM International
2016 New Faculty

ABD A. ARKADAN
Teaching Professor,
Electrical Engineering and Computer Science

MICHAEL BARANKIN
Teaching Assistant Professor, Chemical and Biological Engineering

MELANIE BRANDT
Teaching Assistant Professor, Liberal Arts and International Studies
2016 New Faculty

AMY CLARKE
Associate Professor, Metallurgical and Materials Engineering

KESTER CLARKE
Assistant Professor, Metallurgical and Materials Engineering

CHRIS COULSTON
Teaching Associate Professor, Electrical Engineering and Computer Science
2016 New Faculty

KRISTINE CSAVINA
Teaching Professor, Mechanical Engineering

BRANDON DUGAN
Associate Professor, Geophysics

GREGORY FASSHAUER
Professor and Department Head, Applied Mathematics and Statistics
2016 New Faculty

TULAY FLAMAND
Assistant Professor, Economics and Business

DIEGO ARMANDO GOMEZ-GUALDRON
Assistant Professor, Chemical and Biological Engineering

RICHARD HUNT
Assistant Professor, Economics and Business
2016 New Faculty

KRISTOPH-DIETRICH KINZLI
Teaching Professor, Civil and Environmental Engineering

ADRIANNE KROEPSCH
Assistant Professor, Liberal Arts and International Studies

KARIN LEIDERMANN
Assistant Professor, Applied Mathematics and Statistics
2016 New Faculty

ALEXEI MILKOV
Professor, Geology and Geological Engineering

JENNIFER MISKIMINS
Associate Professor and Assistant Department Head, Petroleum Engineering
New Faculty

ASHLYN MUNSON
Teaching Associate Professor, AMS

OYVIND NILSEN
Teaching Associate Professor, Mechanical Engineering
2016 New Faculty

ANDREW PEDERSON
Teaching Associate Professor, Economics and Business

ANDREW PETRUSKA
Assistant Professor, Mechanical Engineering

ANGUS ROCKETT
Professor and Department Head, Metallurgical and Materials Engineering
2016 New Faculty

JAMAL ROSTAMI
Associate Professor and Timothy J. Haddon/Alacer Gold Chair, Mining Engineering

GREG RULIFSON
Teaching Assistant Professor, Liberal Arts and International Studies

JOSEPH SAMANIUK
Assistant Professor, Chemical and Biological Engineering
2016 New Faculty

MEENAKSHI SINGH
Assistant Professor, Physics

BETHANY WILCOX
Teaching Assistant Professor, Physics

JENNIFER WILCOX
Associate Professor, Chemical and Biological Engineering
FACULTY AWARDS

CECS

TRACY CAMP, EECS:
IEEE Fellow

LINDA FIGUEROA, CEE:
American Society of Civil Engineering Fellow

D. VAUGHAN GRIFFITHS, CEE:
Suzanne Lacasse 2016 Lecturer International Society for Soil Mechanics and Geotechnical Engineering

TISSA ILLANGASEKARE, CEE:
Soil Science Society of America Fellow, and 2015 Langbein Lecture Award from the American Geophysical Union

KATHRYN JOHNSON, EECS:
Exemplar in Engineering Ethics Education Award, National Academy of Engineering

ROBERT KEE, ME:
Bernard Lewis Gold Medal, Combustion Institute

NING LU, CEE:
ASCE’s Engineering Mechanics Institute Fellow

JOHN MCCRAY, CEE:
ASCE’s Environmental and Water Resource Institute Fellow

MARCELO SIMÕES:
IEEE Fellow

KAMINI SINGHA, CEE:
National Ground Water Research and Educational Foundation’s 2017 Darcy Lecturer

CATHERINE SKOKAN, EECS:
American Society for Engineering Education Fellow
Inaugural Daniels Fund Faculty Fellows

SARAH HITT AND TONI LEFTON
Liberal Arts and International Studies
“Ethics Across the Honors Curriculum: Using a New First Year Honors Course as a Foundational Framework”

MELISSA KREBS
Chemical and Biological Engineering
“Ethics in Biomedical Engineering”

JEFFREY PAONE AND CYNDI RADER
Electrical Engineering and Computer Science
“Ethics in the Computer Science Curriculum”

PAUL SANTI
Geology and Geological Engineering
“Ethics Education for Geological Engineers”

CHUAN YUE
Electrical Engineering and Computer Science
“Incorporating Ethics Instruction in Security and Privacy Courses”
Becca Flintoft co-authored article on enriching the student learning experience in higher ed journal *About Campus*
2016 Intensive Course Revision Initiative

29 faculty members participated in focused learning and study about course design, pedagogical practices and ways to engineer learning opportunities throughout June 2016.

They are significantly redesigning their courses and laying the foundation for advancing learning by Engineering Learning at Mines.

Learn more: trefnycenter.mines.edu/2016.html

2017 Applications now being accepted:
Visit TrefnyCenter.mines.edu/2017.html for more information and to apply.
### Innovative Instruction Center

**Summer 2016 Cohort Intensive Course Revision Initiative**

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<tr>
<th>Names</th>
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<tr>
<td>Yosef Allam</td>
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<tr>
<td>Linda Battalora</td>
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<td>Melanie Brandt</td>
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<td>Kristine Callan</td>
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<td>Debra Carney</td>
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<td>Rebecca Swanson</td>
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<td>Eric Toberer</td>
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2017 Intensive Course Revision
TREFNY CENTER

APPLY NOW FOR THE 2017 COHORT

Receive one month’s salary, ongoing support and join a cohort of faculty to learn new pedagogy and course design theory while working to redesign a course you will teach.

DEADLINE TO APPLY: October 11, 2016, 5 p.m.
#1 engineering school USA TODAY College’s “The top 10 engineering colleges in the U.S.” (2015)

#1 public school in the state for best value colleges (average starting salary for graduates: $66,700), #6 nationally by New York-based SmartAsset (2016)

#7 in Brookings’ ‘value-added’ college rankings (2015)

#18 in the 2015-2016 Learfield Sports Directors’ Cup by the National Association of Collegiate Directors of Athletics


#17 Materials Engineering
#29 in Top Public Schools
#38 in High School Counselor Rankings
#41 in Best Undergraduate Engineering Programs
#55 in Best Graduate Schools — Engineering
#75 for Best National Universities
Connect with Mines

mines.edu/news