

## **Signature First-Year Experiences: Creating a distinctive first-year experience in- and out-of-the classroom**

The two Campus Conference Sessions began with a brief overview of past efforts to redefine the first year experience at Mines, including work done by the Core Curriculum Committee. Following this brief overview, we then situated the conversation to focus on the first-year experience holistically (see PowerPoint slides). Following, table groups discussed and charted key points related to the following prompts/questions:

- What are the experiences and/or outcomes we want for all students in year 1?
- How can we create and support the richest learning opportunities for first-year students?

The discussions and charted notes fell into five (5) general categories as outlined below.

### **1. Redefining the Mines culture & experience**

- Orientation and cultivated experiences to teach how to be an active learner (e.g. it is OK to fail and change your thinking, learn to fail spectacularly, Growth Mindset – C. Dweck work). This should be a tenant across all courses to build the growth mindset and life-long learning.
- Explicit opportunities for connections (e.g. student to student, student with faculty/staff, STS, faculty-faculty, all to alumni & industry).
- Rethink course loads, out-of-class expectations, and relevance/value of letter grading.
- Freshman/Senior pairing to work together throughout the semester – exposure to upperclassmen, mentor/mentee.
- Re-Engagement of Senior and Tenured Faculty in first year experience.
- Engage Alumni – Alumni Connections program.
- Engage industry leaders and make in-class work immediately applicable.
- Establish teams to evaluate student progress holistically.
- Add competency-based progress and assessment in addition to grades.
- Able to begin to build personal portfolio of knowledge and skills mastered.
- Make students partners in planning their future.
- Build strong academic foundation to accelerate 4 year graduation rate:
  - Foundational (introductory) understandings of core content, design process, and engineering practices.
  - Foundational (introductory) development of core skills, being an active learner, and the personal and professional development skills identified below.

### **2. Personal Development**

- Identity Development and self-awareness – identify passions. Give them a chance to Explore/Find their passion(s). Opportunity to take exploratory courses that still progress time towards degree.
- Empathy Building and aware of social injustice.
- Financial understanding.
- Creativity & failure.
- Critical thinking. Abstract reasoning.

- Etiquette – professional and social.
- Personal responsibility and civil responsibility.

### **3. Professional Development**

- Public Speaking.
- Communication skills (writing, speaking, listening, etc.).
- Time management.
- Mechanical skills development (e.g., using tools, building things).
- Interpersonal communication, including written and verbal.
- Being an effective team member.
- Learn how to find and use resources.

### **4. Well Rounded Experience**

- Study Abroad.
- Emphasis on Co-Curricular.
- Research opportunities and experiences.
- Service learning.
- Job shadowing.
- Hands on opportunities and experiences.
- Provide more explicit connections between studies and work/life experiences (real world) and to the big picture. The “Big Picture” view is missing currently.
- Art/Literature belongs in first year (they’re important).
- Outdoor education.
- Design sequences and experiences that extend beyond first-year design – e.g. multiple year design projects with Juniors and Seniors.
- Better integrate student life explicitly with academics, e.g. outdoor rec with class field trips.
- More interdisciplinary projects and approaches to the courses.
- Common reading experiences (e.g., Kite Runner).
- More Diversified expectations in curriculum.
- More opportunities to explore alternative options to engineering.
- More explicit connections horizontally and vertically in the curricula.

### **5. More opportunities for exploring majors and pathways**

- Major Showcase – possibly college “adventure” experiences.
- Double Major options.
- Customizable options.
- Eliminate “major identity” in first 3 semesters (all = undeclared).