

November 1, 2017

The Scoop



THE LATEST HAPPENINGS OF THE MINING ENGINEERING DEPARTMENT AT THE UNIVERSITY OF UTAH



Women In Mining

Sign up for WIM for only \$10 and get a free shirt! Payment can be made online or directly to Pam.

Movie Night!!

Join us for a movie night in the Browning building. Refreshments will be provided and it will be a great time.

~ 6 pm

NOV 6 th

Sustainability Realized

Come to ASB 220 to hear Frank Mcallister speak about sustainability in mining. (make-up seminar!)

6 pm

NOV 9 th

SME Shirts

Purchase your shirts by Nov. 3rd. Orders will be placed soon and they are going to be amazing.



MINING ENGINEERING
-20 17-

NOV 17th WIM November Meeting

Meet in the conference room in the mining office. We will be doing filmed mock interviews! Come see how you look during an interview.

1:00 PM

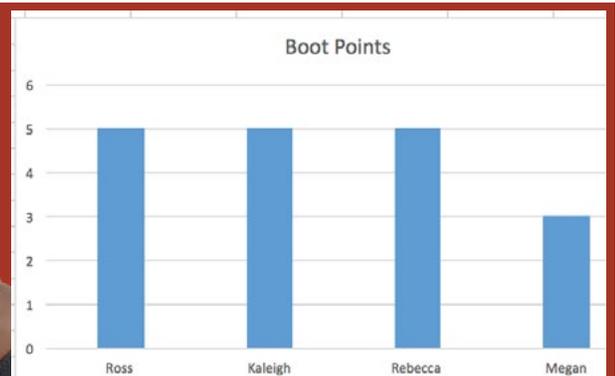
Thanksgiving

Nov. 23 - 26

Remember to keep applying for scholarships! You have a 100% chance of not receiving one if you don't apply. SME Scholarships are due Nov 15. Contact Leigh Seeley if you need help.



For any announcements or activities you would like included. Please contact: breanna1sanders@gmail.com



Summer Internships

Check out some more interesting internships our students had this summer!

Leigh Seeley

My name is Leigh Seeley and I was able to have an internship this summer. I had applied for quite a few positions, but either hadn't heard from them or had received negative answers. As I was taking a few classes at SLCC this summer, I was hoping to find a position within Utah. As May slipped away, I was consigning myself to an internship-less summer.

Then, Dr. Nelson gave me a call and asked if I wanted to work for a company called American Tailings. Now, I was ready for anything, so I accepted and was able to do research for this company. The goal of this summer was to research old mine tailings ponds in Utah to see if we could reprocess them at a profit. I found myself putting hours into studying old books, meeting with the company and other informative people, and scanning the internet for any scrap of information that would give me an idea of if a certain site was worth looking at. This internship wasn't your typical summer mining job, but it was still mining and important to our industry.



Be sure to check out the next issue of the Scoop for more summer spotlights.

Daniel McCormick and Dean Kopchock



Over the summer Dean and Daniel worked on a ventilation project with Dr. Calizaya for NIOSH. His research involves reduction of sound with Spendrup auxiliary fans and silencer. The research involved taking pressure and sound surveys of the fan system. The fan system consisted of 20 foot duct with a 10hp Spendrup fan and four different silencers in an exhaust and blower configuration.

Dean,

My duties on the ventilation project with Dr. Calizaya were to measure the sound level and noise levels at 10 different stations, around a fan configuration. This was done by using a Sound level meter and two dosimeters, both made by 3M, the data was analyzed by using 3M's detection management software. These sound levels and noise levels varied depending on what type of silencer or silencers, were attached to the fan. One of the main objectives of this project was to see how noise and sound levels would change when using different materials inside the silencers. It is known in the mining industry that silencers significantly reduce hearing hazards when properly maintained, but during this study it was found that density does contribute to the reduction of sound and noise levels. With this research project I had the opportunity to be a part of a team that went to an underground potash mine in New Mexico, where we conducted multiple ventilation studies on different size fans throughout the mine's operation. Working with Dr. Calizaya, Dan and other people associated with the project has been an awesome experience that has taught me a great deal about ventilation and how research projects are conducted.

Daniel,

My job was to take pressures surveys. The purpose of the survey is to see how silencers effect pressure and flow rate through the fan system. Pressure was measured using a pitot tube and a digital manometer. Two types of pressures are measured, static head and velocity head. The pressures data is used to calculate total head, velocity, and flow rate. The silencer effects the fan system by decreasing the flow rate and increasing the pressure. Working for Dr. Calizaya taught me a great deal about ventilation concepts and calculations, which gave me a head start in his ventilation class.

If you are reading this... email Brianna "I'm a funky monkey" for 1 free boot point.