MNGE 315: Surface Mining – Spring 2017

Instructor: Dr. Manoj K. Mohanty
Professor
Department of Mining and Mineral Resources Engineering
Southern Illinois University at Carbondale

COURSE SYLLABUS

Instructor Code: 709
3 Credit Hours
2.00 - 3.15 pm, M and W
Room # A-29

Email: mmohanty@siu.edu
Office: Engineering E-8
Phone: 453 7910
Office Hrs: 3.15-4.45 pm, M & W

Course Objectives

To provide basic knowledge and understanding of surface mining methods, relevant unit operations, including drilling, blasting, loading and hauling as well as equipment sizing and selection considerations. Topics related to mined land reclamation and restoration will also be discussed in this course. Field experience will be provided through at least one mine trip.

Prerequisite: MNGE 270; Required Textbook: None

Lecture Topics

1. Introduction
2. Mineral Reserve Estimation
3. Surface Mine Development
4. Surface Mining Unit Operations
   4.1 Drilling
   4.2 Blasting
   4.3 Loading
   4.4 Hauling
5. Surface Mining Methods
6. Land Reclamation
7. Environmental Aspects of Surface Mining

Recommended Books for Reading


Grading:

Quiz: 20%
Homework: 15%
Project: 10%
Field Tour Report: 5%
Mid Term Exam (Date to be announced) 25%
Final Exam (May 8, Monday, 2.45 to 4.45 pm): 25%
The standard grading policy is described as follows:

<table>
<thead>
<tr>
<th>Score Range</th>
<th>Grade</th>
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<tbody>
<tr>
<td>90 - 100</td>
<td>A</td>
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<tr>
<td>80 - 89</td>
<td>B</td>
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<tr>
<td>70 - 79</td>
<td>C</td>
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<td>60 - 69</td>
<td>D</td>
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<tr>
<td>&lt; 60</td>
<td>F</td>
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**Late Policy**

Late homework will be penalized at a rate of 5% points for each day after the assigned due date. No homework will be accepted one week or more after the due date or any other date specified by the Instructor.

Make-up exams may be given ONLY in emergency situations.
Syllabus Attachment
Spring 2017

Office of the Provost: http://provost.siu.edu/

SAFETY AWARENESS FACTS AND EDUCATION
Title IX makes it clear that violence and harassment based on sex and gender is a Civil Rights offense subject to the same kinds of accountability and the same kinds of support applied to offenses against other protected categories such as race, national origin, etc. If you or someone you know has been harassed or assaulted, you can find the appropriate resources here:
http://safety.siu.edu

SALUKI CARES
The purpose of Saluki Cares is to develop, facilitate and coordinate a university-wide program of care and support for students in any type of distress—physical, emotional, financial, or personal. By working closely with faculty, staff, students and their families, SIU will continue to display a culture of care and demonstrate to other students and their families that they are an important part of the community. For information on Saluki Cares: call (618) 453-1492, email siucares@siu.edu, or http://salukicares.siu.edu/

SIU'S EARLY WARNING INTERVENTION PROGRAM (EWIP)
Students enrolled in courses participating in SIU's Early Warning Intervention Program might be contacted by University staff during a semester. More information can be found at the Core Curriculum's Overview webpage: http://corecurriculum.siu.edu/program-overview/

EMERGENCY PROCEDURES
We ask that you become familiar with Emergency Preparedness @ SIU. Emergency response information is available on posters on buildings on campus, or the Emergency Preparedness @ SIU website, and through text and email alerts. To register for alerts visit: http://emergency.siu.edu/

STUDENT MULTICULTURAL RESOURCES CENTER
The Student Multicultural Resource Center serves as a catalyst for inclusion, diversity and innovation. As the Center continues its work, we are here to ensure that you think, grow and succeed. We encourage you to step by the Center, located in Granell Commons, to see the resources available and discover ways you can get involved on the campus. Visit us at http://inclusiveexcellence.siu.edu/

LEARNING AND SUPPORT SERVICES
Help is within reach. Learning support services offers free tutoring on campus and math labs. To find more information please visit the Center for Learning and Support Services website: Tutoring: http://tutoring.siu.edu/
Math Labs http://math.siu.edu/courses/course-help.php
WRITING CENTER
The Writing Center offers free tutoring services to all SIU students and faculty. To find a Center or Schedule an appointment please visit: http://write.siu.edu/

AFFIRMATIVE ACTION & EQUAL OPPORTUNITY
Our office's main goal is to ensure that the university complies with federal and state equity policies and handles reporting and investigating of discrimination cases. For more information visit: http://diversity.siu.edu/

MILITARY COMMUNITY
There are complexities of being a member of the military community and also a student. Drill schedules, calls to active duty, complications with GI Bill disbursement, and other unforeseen military and veteran related developments can complicate academic life. If you are a member of the military community and in need of accommodations please visit Veterans Services at http://veterans.siu.edu/

Additional Resources:
ADVICE: http://advisement.siu.edu/
SIU ONLINE: https://online.siu.edu/
SALUKI SOLUTION FINDER: http://solutionfinder.siu.edu/
MORRIS LIBRARY HOURS: http://library.siu.edu/hours