Subject: Business – Management  Number: EBGN 553

Course Title: PROJECT MANAGEMENT

Semester/Year: Fall 2019
(Preliminary – subject to final version)

Instructor:

David N. Culbreth, Professor of Practice

Contact information: Office: Engineering Hall #130
Office Phone: 303-273-3492
Cell: 720-394-2947
Email: dculbreth@mines.edu

Office hours: Monday: 3:30-5:30pm
Tuesday: 9:00 – 12:00 noon
Wednesday: 3:30-5:30pm
Thursday: 9:00 – 12:00 noon
Friday:

Class meeting days/times: Monday & Wednesday, 11:00am – 12:15pm.
Class meeting location: TBD

Teaching Assistant: N/A

Instructional activity: ___ hours lecture ___ hours lab ___ semester hours

Course designation: _X_ Common Core ___ Distributed Science or Engineering
___ Major requirement ___ Elective ___ Other (please describe ___________)

Course description from Bulletin:

Project management has evolved into a business process broadly used in organizations to accomplish goals and objectives through teams. This course covers the essential principles of traditional project management consistent with professional certification requirements (the Project Management Institute’s PMP® certification). The traditional project management phases of project initiation, planning, execution, monitoring, control and project closure are covered including related scheduling, estimating, risk assessment and various other analytical tools. Students will gain experience using Microsoft Project. Organizational structure and culture issues are analyzed to understand how they can impact project management success, and the concepts of project portfolios and project programs are applied from the organizational perspective. Leadership principals and soft skills such as conflict management are
Agile project management methodologies are introduced, including adaptive and iterative processes, scrum, lean, and other agile tools and techniques. By the end of the course, students will understand how traditional and agile project management approaches differ and in what situations each might be deployed.

The course is 3 credit hours. Prerequisites: Must be enrolled in the M.S. in Engineering and Technology Management (ETM) Program or by permission from the Instructor.

Textbooks and/or other requirement materials:

ISBN 978-1-119-14822-7 (Hardback)

Harvard Business Publishing – various Case Study documents

Other required supplemental information:

**CANVAS:** Students are required to access to the Mines Canvas site for this course frequently. The course Canvas site will contain supplemental reading materials and links to Internet based resources.

**MS Project:** Students will also be required to perform certain exercises using Microsoft Project 2010, 2013, or 2016. A licensed copy of Microsoft Project software is loaded onto the computer lab computers in Engineering Hall for student use. **Students are not required to purchase a license to Microsoft Project for this course.**

Student learning outcomes: At the conclusion of the class students will...
1. Learn the tools and techniques for small, medium and large projects.
2. Create a work breakdown structure for a proposed project
3. Identify the role and responsibilities of a Project Manager and stakeholders
4. Prepare a project proposal document with schedule, and financial analysis
5. Define the five process groups of traditional project management as defined by the Project management Institute (PMI)
6. Learn the golden rules of change management
7. Explore your own leadership abilities and how to grow as a leader
8. Prepare a statement of work and financial justification for a large project.
9. Perform a basic project risk assessment
10. Identify and analyze the project scope changes, and the resulting risk profile changes for the project.
11. Describe Agile project management and how it differs from traditional project management.
12. Define the envision, speculate, explore, adapt and close phases of Agile project management.

Brief list of topics covered:
1. Defining a project, a program, a portfolio.
2. The five process groups in project management (as defined in the PMBOK).
3. How to scope a project.
4. How to plan a project and apply various planning tools.
5. Project pricing and estimating, and cost control methods.
6. How to launch a project, including managing project management teams.
7. How to monitor and control a project through closure
8. How to apply change management, and financial costing and justification
10. Traditional project management vs. Agile project management models.
12. The project management office (PMO).
13. Applying value over constraints in Agile project management.
14. Leading teams over tasks in Agile.
15. How Agile applies adaptation, iteration, scaling and governing.

**Grading Procedures:** Each student's course grade will be based on the following components:

<table>
<thead>
<tr>
<th>Grading Components</th>
<th>Points</th>
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<tbody>
<tr>
<td>WBS and Estimation</td>
<td>20</td>
</tr>
<tr>
<td>Mid-term Exam</td>
<td>150</td>
</tr>
<tr>
<td>Case studies, readings - Quizzes</td>
<td>130</td>
</tr>
<tr>
<td>The Agile Quiz</td>
<td>75</td>
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<tr>
<td>Agile Cert</td>
<td>25</td>
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<tr>
<td>Mid-Sized SOW</td>
<td>100</td>
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<tr>
<td>Large Project (350 points)</td>
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<tr>
<td>• Proposal Document</td>
<td>150</td>
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<tr>
<td>• Presentation</td>
<td>75</td>
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<tr>
<td>• MS Project Schedule</td>
<td>125</td>
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<tr>
<td>Peer Review for Large Project</td>
<td>50</td>
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<tr>
<td>Attendance/Participation</td>
<td>100</td>
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<tr>
<td><strong>Total Points</strong></td>
<td>1000</td>
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**GRADES**

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<tr>
<th>Points</th>
<th>Grade</th>
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<tbody>
<tr>
<td>934-1000</td>
<td>A</td>
<td>734-766</td>
<td>C</td>
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<tr>
<td>900-933</td>
<td>A-</td>
<td>700-733</td>
<td>C-</td>
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<tr>
<td>867-899</td>
<td>B+</td>
<td>667-699</td>
<td>D+</td>
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<tr>
<td>834-866</td>
<td>B</td>
<td>634-666</td>
<td>D</td>
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<tr>
<td>800-833</td>
<td>B-</td>
<td>600-633</td>
<td>D-</td>
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<tr>
<td>767-799</td>
<td>C+</td>
<td>&lt;600</td>
<td>F</td>
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**Note:** The Instructor reserves the right to revise the grading procedures if the course components change. Any change to the grading procedure shall be announced in advance of any change.

**Description of Each Graded Component:**

**Exams** – There will be no exams for this class. It is a class on project management and, therefore, you will be graded on doing individual and group projects. (small, medium, large)

**Quizzes** – The quizzes will be scheduled, closed-book, in-class test or open-book, timed on Canvas, and will require that you be caught up with the reading.

**Attendance/Participation** – Attendance will be taken in each class and will account for 50% of this segment grade. Participation - it is especially valuable and appreciated when you come to class with questions about the readings. Your interest and participation in class will be the primary factors for this grade. Your class participation will be worth 50% of this segment.

All connectivity (mobile phones, PDAs, pagers, and other electronic devices) must be stored away during class. Use of laptops in the class is a privilege, not a right. Laptops are to be used for class activities only. If you are seen surfing, chatting, e-mailing, etc., you may lose laptop privileges and receive a negative mark for class contribution.

**Case Studies, readings – Quizzes** - You are encouraged to prepare prior to coming to class to discuss the text and case material. It is expected that you have read everything assigned. Short Quizzes on case studies will be located in Canvas which must be taken before class begins for the assigned day. Students will be asked to work in teams and create a Case Study of their own and present a summary of the case.

**Assignments and In-Class Writings** – A variety of individual and team assignments will be made throughout the semester. Some of these will be completed in-class while others will be completed prior to class. The purpose of these assignments is to reinforce the learning aims and to ensure that students remain current in the material, which is key to one’s class contribution.
**Microsoft (MS) Project Tutorial Exercise** – You will use MS Project to complete a tutorial exercise. The tutorial will be posted on our Canvas site several weeks before the due date. On the due date, you will be required to upload a MS Project file and a .pdf of a printed report. These exercises are due on the date indicated on the then-current Class Schedule and Assignments table at the beginning of class. Students can use the MS Project software loaded on one or more of the computers in the Engineering Hall computer lab located on the first or second floor.

**Late assignments** – assignments are due by the start of class of their due date. A 10% penalty will be assessed for assignments turned in before 12:00 midnight that day. An additional 10% will be taken off for each additional day that it is late.

**Absence Policy:** Generally, students are expected to attend every class. Your participation in each class benefits each student in the class as we all learn from each other's contributions, experiences and ideas. It is this sharing of ideas and differing perspectives communicated by class discussions that separate the in-class experience from one that could be provided from merely reading the assigned materials. Therefore, excused or unexcused absences will reflect negatively on your in-class discussion/participation grade component.

The Student Absences webpage outlines CSM's policy regarding student absences. It contains information and documents to obtain excused absences.

Note: All absences that are not documented as excused absences are considered unexcused absences. Faculty members may deny a student the opportunity to make up some or all of the work missed due to unexcused absence(s). However, the faculty members do have the discretion to grant a student permission to make up any missed academic work for an unexcused absence. The faculty member may consider the student's class performance, as well as their attendance, in the decision.

In the case of an absence, the student is responsible for determining what work was missed and for putting forth a good faith effort to review the material on their own.

**Diversity and Inclusion:**
At Colorado School of Mines, we understand that a diverse and inclusive learning environment inspires creativity and innovation, which are essential to the engineering process. We also know that in order to address current and emerging national and global challenges, it is important to learn with and from people who have different backgrounds, thoughts, and experiences.

Our students represent every state in the nation and more than 90 countries around the world, and we continue to make progress in the areas of diversity and inclusion by providing Diversity and Inclusion programs and services to support these efforts.

**Students with Disabilities:**
The Colorado School of Mines is committed to ensuring the full participation of all students in its programs, including students with disabilities. If you anticipate or experience any barriers to learning in this course, please feel welcome to discuss your concerns with me. Students with disabilities may also wish to contact Disability Support Services (DSS) to discuss options to removing barriers in this course, including how to register and request official accommodations. Please visit their website at disabilities.mines.edu for contact and additional information. If you have already been approved for accommodations through DSS, please meet with me at your earliest convenience so we can discuss your needs in this course.

**Accessibility within Canvas:**
Read the Accessibility Statement from Canvas to see how the learning management system at the Colorado School of Mines is committed to providing a system that is usable by everyone. The Canvas platform was built using the most modern HTML and CSS technologies, and is committed to W3C's Web Accessibility Initiative and Section 508 guidelines.

**Discrimination, Harassment, and Title IX:**
All learning opportunities at Mines, including this course, require a safe environment for everyone to be productive and able to share and learn without fear of discrimination or harassment. Mines’ core values of respect, diversity, compassion, and collaboration will be honored in this course, and the standards in this class are the same as those expected in any professional work environment. (More information can be
found here.) Discrimination or harassment of any type will not be tolerated. As a participant in this course, we expect you to respect your instructor and your classmates. As your instructor, it is my responsibility to foster a learning environment that supports diversity of thoughts, perspectives and experiences, and honors your identities. To help accomplish this:

Course rosters are provided to the instructor with the student’s legal name. I will honor your request to address you by an alternate name or gender pronoun. Please advise me of this preference early in the semester so that I may make appropriate changes to my records.

If something is said or done in this course (by anyone, including myself) that made you or others feel uncomfortable, or if your performance in the course is being impacted by your experiences outside of the course, please report it to:

Me (if you are comfortable doing so)
Wellness Center- Counseling (https://www.mines.edu/counseling-center/)
Speak Up (https://www.mines.edu/speak-up/) – Anonymous Option

In this course, we will cultivate a community that supports survivors, prevents interpersonal violence, and promotes a harassment free environment. Title IX and Colorado State law protects individuals from discrimination based on sex and gender in educational programs and activities. Mines takes this obligation seriously and is committed to providing a campus community free from gender and sex-based discrimination. Discrimination, including sexual harassment, sexual violence, stalking, and domestic violence, is prohibited and will not be tolerated within the Mines campus community. If these issues have affected you or someone you know, you can access the appropriate resources on the Mines Title IX website. You can also contact the Mines Title IX Coordinator, Camille Torres, at 303.384.2124 or titleix@mines.edu for more information.

It's on us, all of the Mines community, to engineer a culture of respect.

Policy on Academic Integrity/Misconduct:
The Colorado School of Mines affirms the principle that all individuals associated with the Mines academic community have a responsibility for establishing, maintaining an fostering an understanding and appreciation for academic integrity. In broad terms, this implies protecting the environment of mutual trust within which scholarly exchange occurs, supporting the ability of the faculty to fairly and effectively evaluate every student’s academic achievements, and giving credence to the university’s educational mission, its scholarly objectives and the substance of the degrees it awards. The protection of academic integrity requires there to be clear and consistent standards, as well as confrontation and sanctions when individuals violate those standards. The Colorado School of Mines desires an environment free of any and all forms of academic misconduct and expects students to act with integrity at all times.

Academic misconduct is the intentional act of fraud, in which an individual seeks to claim credit for the work and efforts of another without authorization, or uses unauthorized materials or fabricated information in any academic exercise. Student Academic Misconduct arises when a student violates the principle of academic integrity. Such behavior erodes mutual trust, distorts the fair evaluation of academic achievements, violates the ethical code of behavior upon which education and scholarship rest, and undermines the credibility of the university. Because of the serious institutional and individual ramifications, student misconduct arising from violations of academic integrity is not tolerated at Mines. If a student is found to have engaged in such misconduct sanctions such as change of a grade, loss of institutional privileges, or academic suspension or dismissal may be imposed.

The complete policy can be found in the Mines’ Policy Library.