ENGR 451 Introduction to Project Management
Fall 2009

Instructor Dr. Tracy Christofero, PMP, CIPP/G, SSGB, CSM
Office 338 South Charleston campus
Phone 304-746-2078
E-mail christofero@marshall.edu
Office Hours Wednesdays 10:00 – 12:00
Before/after class and additional times by appointment

Credits 3 credit hours
Date and Time Thursdays 6:30 – 9:00 pm
Location Weisberg Engineering Lab – RM 101

Prerequisites

- ENGR221, co-requisite with ENGR452
- Time value of money analysis
- Cost/benefit analysis
- Familiarity with productivity software, e.g., Excel

Description
This course covers project management fundamentals including project initiation, planning, execution, control, and closing processes. Project definition, selection, estimating, scheduling, resource allocation, effective project teams, and project control will be emphasized.

Topics:

1. Project Management introduction, concepts and definitions
2. Organizational Structures: Work Flow, Matrices, staffing, teams, management and leadership
3. Planning Methodologies: PMI, SCRUM, 6-Sigma, and others
4. Project Initiation: Project Scope definition
5. Project Planning: Project Plan development, Costing/Budgeting, Scheduling, Risk Management, Resource, Communication, and Quality planning. Work Breakdown Structure, Project Charter, Scope, Critical Path, PERT (Program Evaluation and Review Technique), GERT (Graphical Evaluation and Review Technique)
6. Using project planning tools, e.g., Microsoft Project
7. Project Control: Preventative and Corrective actions to keep projects on track
8. Project Closing: Post-mortem analysis and lessons learned documentation

Objectives
Upon successful completion of the course, the student should be able to apply the methods and tools necessary to effectively plan, schedule, and control engineering projects.

Outcomes

1. Apply knowledge of mathematics, science, and engineering
2. Design and conduct projects, and analyze and interpret data
3. Develop a project to meet desired needs within realistic constraints such as economic, environmental, social, political, ethical, health and safety, manufacturability, and sustainability
4. Function on multidisciplinary teams
5. Identify, formulate, and solve engineering problems
6. Understand professional and ethical responsibility
7. Communicate effectively
8. Understand the impact of engineering solutions in a global, economic, environmental, and societal context
9. Recognition of the need for, and an ability to engage in life-long learning
10. Knowledge of contemporary issues
11. Use of techniques, skills, and modern engineering tools necessary for engineering practice.

Required Text

Herzner, H. (2009). Project management: A systems approach to planning, scheduling, and controlling (10th ed.). New York: John Wiley & Sons.

Recommended Text

American Psychological Association (2001, July). Publication Manual of the American Psychological Association (5th ed.).

Assignments

Project management cannot be successful if performed in a vacuum; it takes a team with diverse skills and interests to develop and execute a good project. This course is conducted under the premise that working in teams is often more productive than being a sole contributor; therefore, some class assignments will be team-based. Individual grades will be influenced by the team.

Completion of reading assignments is expected before each class session. You are expected to be well prepared for discussion of all assignments.

All assignment submissions are to be sent electronically via an email with a Word attachment to christofero@marshall.edu prior to the beginning of the class on the date the assignment is due. Hardcopy assignments will not be accepted. Late submissions are subject to a 10% penalty for every day overdue. Submitting after class is considered a day late. If not submitted by the next class, zero points will be assigned. Some assignments will not be accepted late.

The filename and subject line of the email ***must*** include the course number, your first initial and last name, and the assignment name. For example, if your name is John or Jane Doe, your first Assignment would be identified as **ENGR451 JDoe Assignment1** in the Subject line. If this format is not used, you risk your assignments not being credited as received. Be sure your name is also on your paper!

All assignments must be written in a clear and concise manner with good English grammar, punctuation, and spelling; and without technical jargon or slang. Prior to submitting assignments, a spelling and grammar check must be used and a competent proof-reader engaged if you anticipate issues in this area. University resources are identified below. Failure to comply will lower your grade.

Midterm Exam
Details on the Midterm exam will be provided in class.

Final Project
The course Final Project will demonstrate that you can apply the material covered in the course to manage a real-world project. A project plan, written report and oral presentation will be required.

A Project Plan (MS Project or Excel) and detailed status reports on your progress will be presented throughout the semester. Format and duration will be discussed in class. Formal Oral Presentations will be scheduled the end of the semester. The Final Written Report is due by midnight the last night of class.

All projects must be approved in advance. Additional report and presentation details will be provided in class. Presentation grading rubrics are attached.

Topic Selection and Approval
Selecting your project may be the most difficult part of your project. You will want to select a project that is large enough to have plenty of resources, yet small enough to be adequately covered in your report. You will need to clearly state and submit your project idea in one sentence (aka topic sentence).

In-class Presentation
Your project report will be presented in a formal in-class professional quality presentation during the final weeks of class. Grades will be awarded as defined by a Presentation Rubrics worksheet, which will be used by both the instructor and the class audience to evaluate your work. Additional Information regarding in-class presentations will be provided during the semester

Participation
Project managers do not succeed hiding behind closed doors. They actively participate in writing and reviewing professional reports, making business presentations, leading others by example, and facilitating and engaging in business discussions with all levels in an organization. Therefore, your participation grade will be based on your attendance, attentiveness, preparedness, group participation activities, and making *meaningful* contributions. In-class assignments, group activities, quizzes, etc. will count toward your participation grade.

Attendance
Attendance of both your mental and physical self is expected and appreciated. In-class assignments may be given and cannot be made up if you are not in attendance. In the event that you are unable to attend class because of a work or personal emergency, you must send an email well BEFORE class advising that you will not be in attendance. If you arrive late or must leave early, please do so with minimal disruption to those around you. Excessive absences, excused or unexcused, excessive tardiness, and/or early departures may result in a lower grade. You are responsible for understanding course materials whether or not you are present for class.

Cell phones must be put on silent or turned to vibrate. Texting during class is not permitted.

Plagiarism
Plagiarism will not be tolerated! This warrants repeating… Plagiarism will not be tolerated! If you are not familiar with the University's plagiarism policy, please read it carefully (http://www.marshall.edu/muonline/plagiarism.asp). At minimum, plagiarism in this course will result in Failure for that assignment. Depending upon the severity of the offense, additional punitive actions are possible! (Note: submissions may be electronically checked.)

Grading

Class Participation, Quizzes, etc.		100
Homework Assignments		250
Midterm		250
Final Project		400
Project Plans	100 points	
Presentation	150 points	
Paper	150 points	
TOTAL		1000 points

To calculate your grade, divide your points by 10

90 –100 = A
80 – 89 = B
70 – 79 = C
60 – 69 = D
<60 = F

Resources
MU Writing Center and Resources

http://www.marshall.edu/english/writingcenter/owc/

http://www.marshall.edu/english/writingcenter/writingresources.html

Students with Disabilities

Marshall University is committed to equal opportunity in education for all students, including those with physical, learning and psychological disabilities. University policy states that it is the responsibility of students with disabilities to contact the Office of Disabled Student Services (DSS) in Prichard Hall 117, phone 304 696-2271 to provide documentation of their disability. Following this, the DSS Coordinator will send a letter to each of the student's instructors outlining the academic accommodation he/she will need to ensure equality in classroom experiences, outside assignment, testing and grading. The instructor and student will meet to discuss how the accommodation(s) requested will be provided. For more information, please visit http://www.marshall.edu/disabled or contact Disabled Student Services Office at Prichard Hall 11, phone 304-696-2271.

ENGR 451 Presentation Rubrics Fall '09

Presenter_____Reviewer _____

Presentation _____

	1	2	3	4	Total
Organization	Audience cannot understand presentation because there is no sequence of information.	Audience has difficulty following presentation because student jumps around.	Student presents information in logical sequence which audience can follow.	Student presents information in logical, interesting sequence which audience can follow.	
Subject Knowledge	Student does not have grasp of information; student cannot answer questions about subject.	Student is uncomfortable with information and is able to answer only rudimentary questions.	Student is at ease with expected answers to all questions, but fails to elaborate.	Student demonstrates full knowledge (more than required) by answering all class questions with explanations and elaboration.	
Graphics	Student uses superfluous graphics or no graphics	Student occasionally uses graphics that rarely support text and presentation.	Student's graphics relate to text and presentation.	Student's graphics explain and reinforce screen text and presentation.	
Mechanics	Student's presentation has four or more spelling errors and/or grammatical errors.	Presentation has three misspellings and/or grammatical errors.	Presentation has no more than two misspellings and/or grammatical errors.	Presentation has no misspellings or grammatical errors.	
Elocution	Student mumbles, incorrectly pronounces terms, and speaks too quietly for students in the back of class to hear.	Student's voice is low. Student incorrectly pronounces terms. Audience members have difficulty hearing presentation.	Student's voice is clear. Student pronounces most words correctly. Most audience members can hear presentation.	Student uses a clear voice and correct, precise pronunciation of terms so that all audience members can hear presentation.	
Eye Contact	Student reads all of report with no eye contact.	Student occasionally uses eye contact, but still reads most of report.	Student maintains eye contact most of the time but often returns to notes.	Student maintains eye contact with audience, seldom returning to notes.	
				Points	
			Based on Assignment Points	**Multiplier**	
				GRADE POINTS	

Comments: