

# ENGR 411.02W: Engineering Management COURSE SYLLABUS: Fall, 2020

#### INSTRUCTOR INFORMATION

Instructor: Andrea M. Graham, Ph.D., Department Head and Associate Professor

**Location:** Charles Austin Engineering Building (Ag/ET) 213D **Office Hours: TR 11:00am-2:00pm or by appointment via Zoom.** 

Office Phone: 903-468-8737 Office Fax: 903-886-5960

University Email Address: andrea.graham@tamuc.edu

Preferred Form of Communication: email

Communication Response Time: Within 24 hours during normal business hours (8am-5pm M-F)

#### COURSE INFORMATION

**Course Schedule:** Live Lectures held Monday/Wednesday **9:00 AM – 9:50 AM Note:** All lectures will be recorded for students unable to attend live. Recorded lectures will be accessible by all registered students.

Course Location: D2L Course Website

# Materials – Textbooks, Readings, Supplementary Readings

#### Textbook(s) Required

Textbook Required: Project Management, The Managerial Process Erik W. Larson and Clifford F Gray / 8th edition. (7<sup>th</sup> edition also accepted)

Publisher: McGrawHill Education

ISBN- 978-1-260-73615-1

Course lecture slides and supplemental material will be posted on D2L for your reference and

use.

# **Course Description**

Techniques relating to managing engineering activities; project management with Project Definition, Pert/CPM; engineer's transition into management; engineering managerial functions; risk management; productivity assessment/improvement; managing the quality function and communications. Prerequisites: Senior classification.

### **Student Learning Outcomes** (Should be measurable; observable)

Upon completion of this course, the student will be able to:

- 1. Practice the tools of project management such as WBS, R&R Matrix, CPM, PERT, and modern projects' crashing techniques,
- 2. Evaluate risk, cost, and schedule control and management of a project,
- 3. Demonstrate an ability to find out the root causes for various project problems occurred during construction and also to spot the potential project problems in the near future.
- 4. Assess the role of Project Management vs. Functional Management.

### Student Responsibilities or Tips for Success in the Course

#### To be successful in this class, the student must:

- Attend live class sessions
- Actively participate in class work and discussions
- Regularly log into the course website
- Perform research and homework supporting class learning objectives
- Participate as both an individual and as a team member on projects
- Prepare and provide presentations for research and/or projects

#### **COURSE REQUIREMENTS**

#### **Instructional Methods and Activities Assessments**

This course utilizes lectures and assignments to assist students in achieving the course learning outcomes. The assessment criteria for the stated student learning outcomes will include assignments, case studies, projects, midterm exam, and a final exam.

Problems will be assigned to support the instructional material. Students will have an ability to use the techniques, skills, and modern engineering management tools necessary for practice. Students will have an ability to communicate effectively through team projects, case studies and presentations assignments.

#### **Grades**

This course is being instructed fully online.

#### **Point Distribution**

Assessment Type	%
Assignments	20
Exam 1	20
Exam 2	20
Team Project	20
Discussion Boards	10
Attendance/Participation	10
Total	100

The syllabus/schedule are subject to change.

Based on the points received, the grades will be determined according to the criteria below.

Grade Criteria				
Α	В	С	D	F
100 - 90	89 - 80	79 - 70	69 - 60	59 – 0

#### **Important Notes:**

- This course is fully online. Assignments will be posted online and have to be submitted under the designated dropbox at D2L. No e-mail submissions for assignments will be accepted; unless there is a technical problem with D2L.
- Do not forget to title the documents as: yourfirstname your lastname assignment number
- Late submissions for homework receive a 20% reduction, since the solution will be provided immediately after the deadline.

# **TECHNOLOGY REQUIREMENTS**

The following technologies will be required for this class.

- A scientific calculator for exams.
- Microsoft Word, Excel, PowerPoint.
- - Microsoft Project Software

#### **LMS**

All course sections offered by Texas A&M University-Commerce have a corresponding course shell in the myLeo Online Learning Management System (LMS). Below are technical requirements

#### LMS Requirements:

https://community.brightspace.com/s/article/Brightspace-Platform-Requirements

#### LMS Browser Support:

https://documentation.brightspace.com/EN/brightspace/requirements/all/browser\_support.htm

#### YouSeeU Virtual Classroom Requirements:

https://support.youseeu.com/hc/en-us/articles/115007031107-Basic-System-Requirements

#### ACCESS AND NAVIGATION

You will need your campus-wide ID (CWID) and password to log into the course. If you do not know your CWID or have forgotten your password, contact the Center for IT Excellence (CITE) at 903.468.6000 or <a href="https://example.com/helpdesk@tamuc.edu">helpdesk@tamuc.edu</a>.

**Note:** Personal computer and internet connection problems do not excuse the requirement to complete all course work in a timely and satisfactory manner. Each student needs to have a backup method to deal with these inevitable problems. These methods might include the availability of a backup PC at home or work, the temporary use of a computer at a friend's home, the local library, office service companies, Starbucks, a TAMUC campus open computer lab, etc.

The syllabus/schedule are subject to change.

#### COMMUNICATION AND SUPPORT

If you have any questions or are having difficulties with the course material, please contact your Instructor.

### **Technical Support**

If you are having technical difficulty with any part of Brightspace, please contact Brightspace Technical Support at 1-877-325-7778. Other support options can be found here: https://community.brightspace.com/support/s/contactsupport

#### Interaction with Instructor Statement

The instructor will respond to your questions on D2L tools within 24 hours. For urgent questions, and for questions that are not answered within 24 hours, please prefer e-mail correspondence

#### COURSE AND UNIVERSITY PROCEDURES/POLICIES

### Course Specific Procedures/Policies

- 1. One day late assignment is accepted with a 20% grade deduction; after this, no assignment will be accepted.
- 2. You will be expected to do all the readings throughout the semester.
- 3. Each exam will be given at a predetermined specified time through D2L in the same manner a traditionally face to face exam would be scheduled.
- 4. There will be one design assignment and it will be a team/group project.
- 5. The syllabus is a guide. Circumstances and events, such as student progress, may make it necessary for the instructor to modify the syllabus during the semester. Any changes made to the syllabus will be announced in advance.
- 6. No make-up exams will be permitted unless official documentation for absences is provided (e.g., death in the family, illness).

# Syllabus Change Policy

The syllabus is a guide. Circumstances and events, such as student progress, may make it necessary for the instructor to modify the syllabus during the semester. Any changes made to the syllabus will be announced in advance.

# **University Specific Procedures**

#### Student Conduct

All students enrolled at the University shall follow the tenets of common decency and acceptable behavior conducive to a positive learning environment. The Code of Student Conduct is described in detail in the <u>Student Guidebook</u>.

http://www.tamuc.edu/admissions/registrar/documents/studentGuidebook.pdf

Students should also consult the Rules of Netiquette for more information regarding how to interact with students in an online forum: <a href="Netiquette">Netiquette</a> <a h

### TAMUC Attendance

For more information about the attendance policy please visit the <u>Attendance</u> webpage and <u>Procedure 13.99.99.R0.01</u>.

http://www.tamuc.edu/admissions/registrar/generalInformation/attendance.aspx

http://www.tamuc.edu/aboutUs/policiesProceduresStandardsStatements/rulesProcedures/13students/academic/13.99.99.R0.01.pdf

### Academic Integrity

Students at Texas A&M University-Commerce are expected to maintain high standards of integrity and honesty in all of their scholastic work. For more details and the definition of academic dishonesty see the following procedures:

Undergraduate Academic Dishonesty 13.99.99.R0.03

http://www.tamuc.edu/aboutUs/policiesProceduresStandardsStatements/rulesProcedures/13students/undergraduates/13.99.99.R0.03UndergraduateAcademicDishonesty.pdf

Graduate Student Academic Dishonesty 13.99.99.R0.10

http://www.tamuc.edu/aboutUs/policiesProceduresStandardsStatements/rulesProcedures/13students/graduate/13.99.99.R0.10GraduateStudentAcademicDishonesty.pdf

#### ADA Statement

#### **Students with Disabilities**

The Americans with Disabilities Act (ADA) is a federal anti-discrimination statute that provides comprehensive civil rights protection for persons with disabilities. Among other things, this legislation requires that all students with disabilities be guaranteed a learning environment that provides for reasonable accommodation of their disabilities. If you have a disability requiring an accommodation, please contact:

# Office of Student Disability Resources and Services

Texas A&M University-Commerce Gee Library- Room 132 Phone (903) 886-5150 or (903) 886-5835

Fax (903) 468-8148

Email: StudentDisabilityServices@tamuc.edu

Website: Office of Student Disability Resources and Services

http://www.tamuc.edu/campusLife/campusServices/studentDisabilityResourcesAndServ ices/

### Nondiscrimination Notice

Texas A&M University-Commerce will comply in the classroom, and in online courses, with all federal and state laws prohibiting discrimination and related retaliation on the basis of race, color, religion, sex, national origin, disability, age, genetic information or veteran status. Further, an environment free from discrimination on the basis of sexual orientation, gender identity, or gender expression will be maintained.

### **Campus Concealed Carry Statement**

Texas Senate Bill - 11 (Government Code 411.2031, et al.) authorizes the carrying of a concealed handgun in Texas A&M University-Commerce buildings only by persons who have been issued and are in possession of a Texas License to Carry a Handgun. Qualified law enforcement officers or those who are otherwise authorized to carry a concealed handgun in the State of Texas are also permitted to do so. Pursuant to Penal Code (PC) 46.035 and A&M-Commerce Rule 34.06.02.R1, license holders may not carry a concealed handgun in restricted locations.

For a list of locations, please refer to the <u>Carrying Concealed Handguns On Campus</u> document and/or consult your event organizer.

#### Web url:

http://www.tamuc.edu/aboutUs/policiesProceduresStandardsStatements/rulesProcedures/34SafetyOfEmployeesAndStudents/34.06.02.R1.pdf

Pursuant to PC 46.035, the open carrying of handguns is prohibited on all A&M-Commerce campuses. Report violations to the University Police Department at 903-886-5868 or 9-1-1.

# **COURSE OUTLINE / CALENDAR**

Week #	Week of	Topic/Chapter	Assessment
1	Aug 24	Course Introduction Ch. 1- Project Management Overview	Conceptual Questions w/answers
2	Aug 31	Ch. 2-Organization Strategy and Project Selection	Case Analysis Assignment -1
3	Sept 7	Ch. 3-Organization: Structure and Culture	Assignment 1 due
4	Sept 14	Ch. 4- Defining the Project Ch.5- Estimating Project Times and Costs	Discussion Board 1 Conceptual Questions w/answers
5	Sept 21	Ch. 6-Developing a Project Schedule Critical Path Method (CPM)	Case Analysis Assignment -2
6	Sept 28	Ch. 6-Program Evolution and Review Technique (PERT) Ch.7-Managing Risks	Conceptual Questions w/answers Assignment 2 due
7	Oct 5	Exam 1 Ch. 8- Scheduling Resources and Costs	Exam 1(Ch 1-6) 10/5/20
8	Oct 12	Ch. 9 –Reducing Project Duration	Discussion Board 2
9	Oct 19	Ch 10-Being an Effective Project Manager Ch. 11-Managing Project Teams	Conceptual Questions w/answers
10	Oct 26	Ch. 12 –Outsourcing Ch 13-Progress and Performance Measurement and Evaluation	Case Analysis Assignment -3
11	Nov 2	Ch. 14-Project Closure Exam 2	Exam 2 (Ch. 7-13) 11/6/20 Assignment 3 due
12	Nov 9	Team Project formation and Proposal Creation	Presentations via Zoom
13	Nov 16	Project Execution with Report briefing via Zoom	Discussion Board 3 Case Analysis Assignment -4
14	Nov 23	Project Execution with Report briefing via Zoom	Assignment 4 Due
15	Nov 30	Project Report Due	
16	Dec 7	Final Exam Report Presentations	