

SYLLABUS—FALL SEMESTER 2006
MARSHALL UNIVERSITY

Course Name: Project Management
Engineering Management 660, Section 2273

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Course Credit: 3 Semester Hours

Prerequisite: Graduate Program, a willingness to learn, and active class participation is imperative.

Required Text: *Project Management—A Systems Approach to Planning, Scheduling, and Controlling*, by Harold Kerzner, Ninth Edition, Van Nostrand Reinhold, New York, 2006.

Computer Requirements: Microsoft® Project or similar software will be used extensively. Assignments utilizing MS Project will be done throughout the course. Knowledge of MS Access will be helpful but not required.

Course Description: This course presents concepts, methodology, and structure to help people at all levels to lead and participate successfully in projects, both individually and within various organizations. Attention is given to setting objectives, staffing, developing and using accountability, organizing teams, dealing with conflict, organizing work, planning, scheduling, communicating, controlling, and leading.

Expectations: There will be lectures, discussions, and group exercises. Completion of reading assignments is expected. Working in groups is essential for parts of the class and assignments. Quizzes will be unannounced. It can be seen in the grading breakdown below that homework constitutes the biggest portion of the final grade. Homework consists of written assignments, computer exercises using Microsoft Project, and problems that are practical, involve common sense, logic and mathematical solutions. The intent of the course is to be useful, practical with real-life problems and most importantly, the instructor and the students will enjoy the experience. There will not be a final exam.

Grading:

20%	Attendance and Participation (See Attendance Policy below)
10%	Quizzes (Unannounced, approximately 6 during the course)
40%	Homework Assignments
30%	Final Project

Letter Grades: "A" (90 to 100%) **For Achievement of Distinction** This grade shows outstanding achievement in the work performed—beyond what would be considered average or merely acceptable for the assignment(s). Work is accomplished in a manner showing outstanding or excellent understanding of the concepts being studied and their application.

"B" (80-90%) **For Competent and Fully Acceptable Work** Demonstrates good understanding and application of the concepts when fulfilling the assignment(s). Work completed in an average, competent and acceptable manner, but is not particularly outstanding or exceeds expectations. Complete and satisfactory results, but not exemplary in content or presentation.

"C" (70-80%) **For Below Average Performance** This grade would be given for not adequately fulfilling what was asked for in an assignment. For example, perhaps only part, or even most of an assignment was completed, but not in its entirety, or perhaps the assignment was completed but did not demonstrate competency, thus leading to a below average performance.

“D” (Less than 70%) **For Sub-standard Work** This grade would be given for work lacking in content, organization, or not submitted in time to meet schedules.

“F” (Less than 70%) **For Unsatisfactory Work** Failure to complete assignments, failure to submit work on schedule, and failure to present work that is understandable and provides information as specified.

“I” (Incomplete) Given to students not completing course requirements because of illness or other reasons deemed valid by the instructor and/or department.

Honor Code: Cheating in any manner will not be tolerated. Each student is required to do all of the work submitted in his/her name unless a team project has been assigned. Copying or sharing the work of another student or former student in the class is cause for dismissal from the class with a failing grade. Any referenced works must be credited to the original writer to avoid plagiarism.

Policy On Homework: Homework assignments will be due at the beginning of the class period. Late homework will be accepted with a 10% penalty for each class period or portion of each week between class periods after the due date. Unless specifically agreed-to with the instructor in extenuating circumstances, homework due the day of an excused absence is to be emailed or post-marked no later than the due date in order to avoid the late homework penalty. If you are absent, it is your responsibility to obtain the next assignment before the next class period.

Professional Quality Work: It will be required that all work submitted for any assignment in the course will exhibit professional quality. Spelling errors, grammatical mistakes, poorly drawn sketches or illustrations or graphs are not acceptable. All work will be viewed as if it were to be submitted to the President of one's company and none will be submitted on colored paper; sheets torn from a spiral notebook or written on a size other than 8.5" x 11" without approval. All submitted work will be typewritten, written on one side of the paper only, and will be justified (lines squared as shown above or as the printed page).

Writing will be on one side of the paper only and each topic, problem, or written exercise will be submitted on a separate sheet of paper.

Policy On Final Project: A final team project is required of each student. Details will be discussed in class when the final projects are started (last 4 or 5 weeks of classes).

Attendance Policy: Full (100%) attendance at all classes is expected. To be "Excused," absences must be communicated to the instructor in advance, or as soon as reasonably possible in the case of an emergency. Class participation grade will be based on student attendance (5 points per session) and quality of participation (5 points per session maximum)—Participation scoring is as follows: 0 = absent from class, 1 = excused absence, 2 = attends full class period, 3 = individual participation significantly contributes to class understanding and learning, based on instructor's judgment.

Tardiness: Each student will be expected to be in class at the scheduled starting time for each session (4:00 p.m, Tuesday). Tardiness will be considered in the awarding of participation points as discussed above. Consider being on time at the start of class in the same manner as one would consider an important meeting with the President of your company.

EM660-PROJECT MANAGEMENT (FALL 2006, SECTION 2273)
TENTATIVE COURSE OUTLINE

Week 1, August 22

- Professor and Student introductions
- Review of syllabus, Reading assignments, Expectations
- Discussions:
 - What is a project? Characteristics of a project?
 - What is Project Management? Its Characteristics?
 - "People are Project Management"
 - "Communication—The Process of Becoming Like One or As One"
 - Successful project
 - Introduction of Microsoft Project
- Assignments: Read/Study Chapter 1 in text.
 - Do workbook questions for Chapter 1 (Handout, 35 questions, mark references, answers on a separate sheet for turn-in)
 - Essay: "People are Project Management" (HW-1)
 - Essay: "Communication ..." (HW-2)
 - MS Project: "Dog House Project" (HW-3) Describe, Write tasks.
 - Study "Williams Machine Tool Company" Answer questions (Turn in for H.W.)

Week 2, August 29

- Go over Questions from Chapter 1 (Quiz-1), Discuss Williams Machine Tool, discuss essays.
- Discussions:
 - Importance of People
 - People roles
 - Project Manager
 - Functional (Line Manager)
 - Project Champion
 - Project Sponsor
 - Product/Project Life Cycle
 - Systems approach to projects
 - Characteristics of a good Objective
 - SMART Objectives
 - Triple Constraints
 - Tolerances to Constraints

Assignment 2: Objectives, Constraints, Tolerances for Wedding Reception

Assignment 5: Interview Project Managers

Assignment: Read/Study Chapter 2 (Concepts and Definitions), Answer workbook questions, turn in as H.W.

Read/Study: Chapter 2 in text.

Week 3, September 5

- Quiz (?)
- Discuss Week 2 assignments (Wedding, Chapter 2 questions)
- Read/study Chapter 5 & 6 in text. (Planning and Time Management)
- Discussions
 - Responsibility and Accountability
 - Authority
 - Team Selection
 - Theory 'X' and Theory 'Y' Management styles
 - Good meeting management

Assignment 3: Good Meeting, Bad Meeting (two essays)

Assignment : 'Meetings, Meetings, Meetings' handout.

Assignment: 'The Bad Apple' handout.

Week 4, September 12

- Discussion of assignments.
- Lecture/discussions
 - Meetings
 - Planning (Why do plans Fail?)
 - Critical Success Factors
 - Charters
 - Scope/Standards
 - Planning/Replanning
 - Quadrant II Management

Assignment 4: Practicing Quadrant II Management

Assignment: Re-plan the doghouse tasks (Establish an order for doing the tasks and task duration)

Assignment: Read/study Chapter 5, answer workbook questions from handout, turn in as H.W.

Week 5, September 19

- Quiz?
- Review homework, go over Chapter 5 questions.
- Lecture/discussions
 - Uncertainties
 - Pricing and Estimating (Chapter 14)
 - Cost estimation
 - Time estimation
 - Risk funds: Contingencies and Contingency funds.

Assignment: Calculate Optimistic, Expected, Pessimistic times for each doghouse task using MS Project

Assignment: 'Time Management and Stress' (Questions from Chapter 6, Answer workbook questions)

Assignment: 'Pricing and Estimating,' (Questions from Chapter 14, Answer workbook questions)

Week 6, September 26

- Review homework
- Lecture/discussions (Study Chapter 11)
 - PERT Analysis (Handout and problems)
 - PERT time calculations
 - PERT network analysis
 - Work Breakdown Structures (WBS)
 - Pictorial Form
 - List Form
 - Linear Responsibility Charts (LRC)

Assignment: WBS and LRC for Kitchen Remodeling

Assignment: WBS and LRC for Doghouse project using MS Project.

Assignment: Problem 11-26 (HW)

Week 7, October 3

- Review homework (Quiz?)
- Lecture/discussions (Chapter 12)
 - Network diagrams
 - 'Dummy' activities
 - Milestones
 - Critical Path
 - Time Calculations
 - Task Predecessors and Successors
 - Time Estimation, actual elapsed calendar time
 - ES, EF, LS, LF, D, and Slack as calculation tools

Assignment: Microsoft Project #1(Doing calculations manually and by MS Project)

Assignment: Problems 12-13 and 12-14 (manually and by MS Project)

Extra Credit (10 points): PERT (Networks from handout and sample calculations)

Assignment: Predecessors for doghouse project (must use parallel paths through network)

Week 8, October 10

- Review homework (Prob. 12-13, 12-14)
- Lecture/Review types of networks
- Lecture/Discuss in depth (Activities on the Node, Activities on the arrow)
- Lecture/Discuss in depth (Calculation slacks, Calculation of EF, ES, LS, LF)
- Lecture/Discussion 'Crashing Projects.'

Assignment: Problem 12-17 (Discuss method of solution)

Assignment: 'Crashing the Effort'

Week 9, October 17

QUIZ: Chapter 12 (Multiple Choice, Problems regarding Networks, 'Crashing.')

 [45 minutes]

- Review HW (Problem 12-17, 'Crashing the Effort')
- Video Tape: House Building Race in San Diego
 - Discussion of video tape
 - Discussion of use of crashing, parallel paths in networks, planning
- Conversion of Activities on Arrow to Activities on Node Network Diagrams

Assignment: Essay on video tape.

Assignment: Network diagram for doghouse project

Week 10, October 24

- Travel to TOYOTA Plant at Buffalo, West Virginia
 - Conference room discussion about Toyota operations
 - Plant tour
 - Follow-up questions
 - Discuss homework/lecture from Week 9.
- Return to MU or home at approx. 9:00 p.m.

Assignment: Essay on visit to TOYOTA

Assignment: Problem 12-21 (Discuss method of approaching the problem)

Assignment: Final work on doghouse project (WBS, LRC, durations, predecessors, network diagram)

Week 11, October 31

- Review/discuss Prob. 12-21
- Bar (Gantt) charts
- Reporting (use of MS Project to generate reports)
- Budgets
- Cash flow in a project
- Discussion of Problem 12-23 (Method of Solution)
- Explain requirements for final project

Assignment: Problem 12-23

Assignment: Project Proposal for Team Final Project

Week 12, November 7

- Review/discuss Prob. 12-23
- Assign final project teams
- Decide/Submit/Approve Final Team Projects
- Begin work on final projects

Week 13, November 14 Week 14, November 21 (Fall Break) Week 15, November 28

<-----Work on Final Projects----->

Week 16, December 5 (Final Projects Due)

...Submit Final Project Reports.....