

George Mason University
School of Information Technology and Engineering
Department of Systems Engineering and Operations Research

Spring 2012 SYST 530

SYST 530 - Systems Management and Evaluation

7:20 pm – 10:00 pm Thursday Innovation Hall 131– GMU and Elluminate

Syllabus

Professor: *Dr. Philip Barry*

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Office Hours: *By appointment*

Home Page: *Class Web Site:* <http://mymason.gmu.edu>

(required username and password)

Course Description: This course provides the necessary techniques for evaluating the cost and operational effectiveness of system designs and systems management strategies. Performance measurement, work breakdown structures, cost estimating and quality management are discussed. Configuration management, standards, and an in depth case studies of a system is examined.

References:

Project Management: A Systems Approach to Planning, Scheduling and Controlling, 10th edition (2009); Harold Kerzner. John Wiley and Sons ISBN-13: 978-0470278703

Grades 40% - Group Project, 40% - Exams, 15% - Paper, 5% -Class Participation.

Group Projects

The Group Project Studies is the focal point of this course. The group will apply the techniques discussed in the lecture to a systems engineering project that will track through the semester. Also, students will take part in two In Progress Reviews. As part of the IPRs, students will provide written feedback to other groups on the deliverables to date for their group project.

Paper

Each student will be required to write a paper on an area pertinent to this class (e.g. leadership, performance measurement, etc.). There will be two deliverables for this paper. The first deliverable will be a summary of the paper including an annotated outline for the paper. The final deliverable will be due near the end of the semester. The final deliverable must be at least 15 pages, 1 1/2 spacing, with at least eight distinct references. References DO NOT include lecture notes or the textbook. The paper will be graded based on the original contribution of the author. It will not be satisfactory to just document leadership styles, for example. The author would be expected to compare and contrast leadership styles and give an opinion on the subject.

Exams

Two exams: The midterm will be in-class and will cover the first part of the semester. The final will be in-class and will cover the second part of the semester.

Grades are allocated as follows:

Average	Letter Grade
[94,100]	A
[90,93)	A-
[86,89)	B+
[83,85)	B
[80,82)	B-
[70,79)	C
[0, 69)	F

Late Submission of papers or project will NOT be accepted.

Agenda:

Week 1> 26 Jan

- Background; Introductions
- Lecture: Kerzner Chapter 1 – Overview
- Form Groups

Week 2>2 Feb

- Reevaluate Groups
- Introduction of the Case Study for the Group Project
- Lecture: Kerzner Chapter 2 - Project Management Growth: Concepts and Definitions
- Lecture: Kerzner Chapter 3 – Organizational Structures
- Group Assignment 1

Week 3>9 Feb

- Lecture: Kerzner Chapter 4 - Organizing And Staffing The Project Office And Team
- Group Assignment 2

Week 4>16 Feb

- Lecture: Kerzner Chapter 11 - Planning
- Lecture: Kerzner Chapter 12 - Network Scheduling Techniques
- Group Assignment 3

Week 5>23 Feb

- Kerzner Chapter 5 - Management Functions Theory X – Theory Y One-Page Test
- Group Assignment 4

Week 6>1 Mar

- No Class Meeting
- Exam Number 1 (Take Home)
- Group Assignment 5

Week 7>8 Mar

- Exam 1 Due
- Lecture: Risk Management
- Homework: Myers-Briggs personality test at: <http://www.humanmetrics.com/cgi-win/JTypes2.asp>
 - [Please submit 4 letter result in Blackboard by 15 Mar]
- Group Assignment 6

Week 8>15 Mar

- Spring Break

Week 8>22 Mar

- Exam Review
- IPR 1
- Lecture: Myers-Briggs
- Paper: First deliverable due
 - Annotated Outline
 - Individual presentation: 5 minute presentation on paper
- Group Assignment 6

Week 9>29 Mar

- Lecture: Kerzner Chapter 14 - Pricing and Estimating Lecture on Activity Based Costing
- Lecture: Kerzner Chapter 15 – Cost Control
- Group Assignment 7

Week 10>5 Apr

- Lecture: Kerzner Chapter 6 - Time Management Lecture
- Lecture: Kerzner Chapter 7 – Conflicts
- Group Assignment 8

Week 11>12 Apr

- Individual presentations: 10 minute discussion on term paper

- Group Assignment 9

Week 12>19 Apr

- Lecture: Chapter 16 - Trade-off Analysis In A Project Environment
- Exam Number 2 (Take Home)

Week 13>26 Apr

- Exam 2 Due
- In-Progress Review 2
 - Review Schedule: 1 Reviews 3; 3 Reviews 2; 4 Reviews 1; 2 Reviews 4
- Group Assignment 10

Week 14>3 May

- Exam 2 Review
- Lecture: Kerzner Chapter 9 - The Variables For Success
- Lecture: Kerzner Chapter 10 - Working with Executives
- Group Assignment 11
- Paper: Final paper due (in Blackboard)

Week 15>10 May

- Group Presentations
- Final Project Binder due