

# SYLLABUS

## SYST 530 - Systems Management and Evaluation

Spring 2010

**Professor:** Dr. Peggy Brouse

**Assignment Submission:** Blackboard usage is required in the class; instructions are below.

**Work Phone:** (703) 993-1502 (with voice mail)

**FAX:** (703) 993-1521

**E-mail:** pbrouse@gmu.edu

**Office:** GMU: Engineering Building - Room 2215

**Office Hours:** By appointment before class

**Course Description:** 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 case studies of systems from different applications areas are discussed.

**Course Hours:** Tuesday 4:30 to 7:10 pm; Innovation Hall 137

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

**Grades:** 20% - group case studies  
10% - individual case study write-ups  
10% - initial paper and presentation  
20% - final paper and presentation  
20% - Exam 1  
20% - Exam 2

## How To Access Blackboard?

- Go to <http://courses.gmu.edu>
- Enter Blackboard ID and password:  
Students need a Blackboard ID and password to login. Their Blackboard ID is their Mason mail user name (e.g. the Blackboard ID for jdoe@gmu.edu would be jdoe). Logging into Blackboard will require the user to enter the same password required to access their Mason email account.
- If you do not know your Mason mail user name, go to <http://mail.gmu.edu> and click on “Activating My Account” icon, follow the steps.
- All assignments have due dates and submissions after the due date/time will not be possible, since Blackboard will automatically block “submit my homework” option.
- From time to time, Blackboard works too slowly. Especially from a dial-up internet connection, Blackboard access may not be so efficient all the time; students are encouraged to submit their work earlier than the deadline.
- If you experience any problem while accessing/using Blackboard, please send an e-mail to Dr. Brouse, [pbrouse@gmu.edu](mailto:pbrouse@gmu.edu)

## **Group Case Studies**

The Group Case Studies are the focal point of student group effort within this course. Groups will meet during class time, but individual preparation may be expected outside of the classroom. There will be groups of several people self-formed during the first meeting of the class. Each group will be expected to present the case study in some manner to engage the rest of the class (e.g. role playing, create a game regarding the case study, etc.) You will be expected to elicit participation from the remainder of the class. Materials used in the presentation should be submitted in Blackboard by ONE member of the group.

## **Individual Case Study Write-Up**

You will be expected to write a 1 – 2 page synopsis of the case study as well as your opinion of the case study before the case study is presented. If your group is presenting the case study you will not be expected to submit an individual write-up for that case study. **The case study homework will be due the day the case study is presented and will not be accepted late.**

## **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 20 pages, 1 1/2 spacing, with at least three references. 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.

## **Additional Resources – for Paper**

Additional Sources: There is a wealth of quality literature available on the subject matter of this course. A few of my favorites are:

INCOSE Insight (informal and short, but educational articles)

INCOSE Systems Engineering Journal

Harvard Business Review (super for the leadership and management portion of the course)

PMI Project Management Journal

PMI PM Network

IEEE Transactions on Systems, Man and Cybernetics

IEEE Transactions on Engineering Management

IEEE Engineering Management Review

Note that there are three main bodies of knowledge that intersect in this course: systems engineering (INCOSE, IEEE), leadership and management (Harvard Business Review), and project management (PMI).

## **Academic Integrity**

GMU is an Honor Code university; please see the University Catalog for a full description of the code and the honor committee process. The principle of academic integrity is taken very seriously and violations are treated gravely. What does academic integrity mean in this course? Essentially this: when you are responsible for a task, you will perform that task. When you rely on someone else's work in an aspect of the performance of that task, you will give full credit in the proper, accepted form. Another aspect of academic integrity is the free play of ideas. Vigorous discussion and debate are encouraged in this course, with the firm expectation that all aspects of the class will be conducted with civility and respect for differing ideas, perspectives, and traditions. When in doubt (of any kind) please ask for guidance and clarification.

## **GMU EMAIL Accounts**

Students must activate their GMU email accounts to receive important University information, including messages related to this class.

## **Disabilities Statement**

If you are a student with a disability and you need academic accommodations, please see me and contact the Disability Resource Center (DRC) at 993-2474. All academic accommodations must be arranged through the DRC.

## **Other Useful Campus Resources:**

WRITING CENTER: A114 Robinson Hall; (703) 993-1200; <http://writingcenter.gmu.edu>

UNIVERSITY LIBRARIES "Ask a Librarian"  
<http://library.gmu.edu/mudge/IM/IMRef.html>

COUNSELING AND PSYCHOLOGICAL SERVICES (CAPS): (703) 993-2380;  
<http://caps.gmu.edu>

### **UNIVERSITY POLICIES**

The University Catalog, <http://catalog.gmu.edu>, is the central resource for university policies affecting student, faculty, and staff conduct in university affairs.

## CLASS SCHEDULE

Week 1>	19 January	<ul style="list-style-type: none"> <li>◆ Background; Introductions</li> <li>◆ Form Groups</li> <li>◆ Lecture: Kerzner Chapter 1 – Overview</li> </ul>
Week 2>	26 January	<ul style="list-style-type: none"> <li>◆ Lecture: Kerzner Chapter 2 - Project Management Growth: Concepts and Definitions</li> <li>◆ Lecture: Kerzner Chapter 3 – Organizational Structures</li> </ul>
Week 3>	2 February	<ul style="list-style-type: none"> <li>◆ Lecture: Kerzner Chapter 4 - Organizing And Staffing The Project Office And Team</li> <li>◆ Island Survival Game</li> </ul>
Week 4>	9 February	<ul style="list-style-type: none"> <li>◆ Group Presentation: Jones and Shepherd Accountants, page 134 led by Group 1</li> <li>◆ Lecture: Kerzner Chapter 5 - Management Functions</li> <li>◆ Theory X – Theory Y One-Page Test</li> </ul>
Week 5>	16 February	<ul style="list-style-type: none"> <li>◆ Group Presentation: The Trophy Project, page 259 led by Group 2</li> <li>◆ Lecture: Kerzner Chapter 6 - Time Management</li> <li>◆ Lecture: Kerzner Chapter 7 - Conflicts</li> </ul>
Week 6>	23 February	<ul style="list-style-type: none"> <li>◆ In class Exam Number 1</li> </ul>
Week 7>	2 March	<ul style="list-style-type: none"> <li>◆ Paper: First deliverable due (in Blackboard)</li> <li>◆ Individual presentation: 5 minute presentation on paper</li> <li>◆ Homework: Myers-Briggs personality test at: <a href="http://www.humanmetrics.com/cgi-win/JTypes2.asp">http://www.humanmetrics.com/cgi-win/JTypes2.asp</a></li> <li>◆ [Please submit 4 letter result in Blackboard by 17 March]</li> </ul>
Week 8>	9 March	<ul style="list-style-type: none"> <li>◆ SPRING BREAK</li> </ul>
Week 9>	16 March	<ul style="list-style-type: none"> <li>◆ Group Presentation: Telestar International (pg.306), led by Group 3</li> <li>◆ Lecture: Myers-Briggs personality test</li> </ul>
Week 10>	23 March	<ul style="list-style-type: none"> <li>◆ Group Presentation: Corwin Corporation, (pg. 387), led by Group 4</li> <li>◆ Lecture: Kerzner Chapter 9 - The Variables For Success</li> <li>◆ Lecture: Kerzner Chapter 10 - Working with Executives</li> <li>◆ Lecture: Kerzner Chapter 11 - Planning</li> </ul>
Week 11>	30 March	<ul style="list-style-type: none"> <li>◆ Lecture: Kerzner Chapter 12 - Network Scheduling Techniques</li> <li>◆ Lecture: Kerzner Chapter 14 - Pricing and Estimating</li> <li>◆ Lecture on Activity Based Costing</li> </ul>

Week 12>	6 April	<ul style="list-style-type: none"> <li>◆ Group Presentation: Crosby Manufacturing Corporation (pg. 520) led by Group 5</li> <li>◆ Lecture: Kerzner Chapter 15 – Cost Control</li> <li>◆ Lecture: Chapter 16 - Trade-off Analysis In A Project Environment</li> <li>◆ Lecture: Chapter 17 – Risk Management</li> </ul>
Week 13>	13 April	<ul style="list-style-type: none"> <li>◆ In class Exam Number 2</li> </ul>
Week 14>	20 April	<ul style="list-style-type: none"> <li>◆ Group Presentation: Teloxby Engineering (A) (pg. 775) led by Group 6</li> <li>◆ Individual presentations: 10 minute presentation on paper</li> </ul>
Week 15>	27 April	<ul style="list-style-type: none"> <li>◆ Paper: Final paper due (in Blackboard)</li> <li>◆ Individual presentations: 10 minute presentation on paper</li> </ul>