## SYLLABUS SYST 530, Section 001 – System Management and Evaluation (73036) Fall 2009

| Instructor:            | Dr. Harold Camp   |  |  |
|------------------------|---|--|--|
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| Office Hours:          | 6 PM to 7 PM Monday and Wednesday<br>Others by appointment  |  |  |
| Course<br>Description: | <b>SYST 530 Systems Management and Evaluation:</b> 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 application areas are discussed. |  |  |
| Text:                  | Text: <i>"Project Management: A Systems Approach to Planning, Scheduling, and Controlling",</i> Harold Kerzner, Tenth Edition, John Wiley and Sons, 2009.<br>ISBN:0470278706  |  |  |
| Grades:                | 30% - Group Project<br>25% - Mid-Term Exam<br>30% - Final Exam<br>15% - Assignments<br>LATE HOMEWORK WILL BE PENALIZED 10% PER WEEK LATE.   |  |  |

#### **Examinations:**

MidTerm and Final Exams are intended to test the student's knowledge of the materials discussed in the readings and lectures. Be prepared to write about the material discussed in class in concise, intelligible English. Examinations are comprehensive over the work performed during the course and the course lecture material. You will be expected to interpret the material of the course, not to repeat it via rote memory. The examinations are intended to enhance the student's classroom experience and challenge the student to correctly apply the course material.

## **Project:**

We dedicate one hour per week of class time to working on, reporting, and discussing our class projects. While, the majority of effort toward the projects will be expended outside of class, one should not minimize the importance of the in-class time (where learning does occur). The project three teams of students; Team C being the customer and Teams S1 and S2 being suppliers. The class will select a system and prepare a system management plan, cost model, performance evaluation plan, system quality for that system, a configuration and data management plan, applicable standards, work breakdown structure and system management schedule. Each team will prepare their systems management approach from the perspective of supplier or customer. Results are discussed and presented during the weekly project time. Additional criteria and guidance for these activities will be given in class. The instructor approves the system prior to proceding with the the project based on the system.

## **Assigned Work for Credit:**

Students are assigned to groups. Assignments may be worked by study groups or individually. Please turn in only one Homework Report with all the names of the individuals who contributed to the report. Caution: one who relies on a study group and does not learn for him/herself probably does not perform well on the examinations. All assignments are due prior to the end of the class period after the assignment was assigned (i.e., in one week) unless otherwise stated at the time of assignment.

## **Classroom Conduct**

You are expected to behave appropriately as engineering professionals.

#### Policies & the Honor Code

Student projects in this course represent group work. Students are required to participate actively in group work and to be able to reproduce that work on the Mid-Term and Final Exam. Homework and other assignments in this course represent individual work. As always the GMU Honor Code holds. Stated in English, do the work yourself. If you need help, see the instructor.

See: http://www.gmu.edu/catalog/apolicies/#Anchor12

#### Attendance Policy

Students are expected to attend each class and the entire class, complete any required preparatory work, and participate actively in lectures, discussions, and group exercises. Students with special needs/disabilities should inform the instructor the first week of classes.

Departmental policy requires students to take exams at the scheduled time and place, unless there are truly compelling circumstances supported by appropriate documentation. Except in such circumstances, failure to attend a scheduled exam will result in a score of zero.

# CLASS SCHEDULE – Updated on 17 August 2009

| Week | Class  | Topics   | Reading          |
|------|--------|--|------------------|
|      | Date   |  | (Before Class)   |
| 1    | Sep 2  | Introduction, Four Systems, and Group<br>Assignments   | Chapters 1 & 2   |
| 2    | Sep 9  | Systems Management Strategies –<br>Discuss Request for Proposal (RFP)                                      | Chapters 3 & 4   |
| 3    | Sep 16 | Effectiveness of Systems Management<br>Strategies—Present RFP, Q&A   | Chapters 5 & 6   |
| 4    | Sep 23 | System Design Strategies – Discuss<br>Proposal Writing   | Chapter 7 & 17   |
| 5    | Sep 30 | Evaluating System Designs – Deliver<br>Proposals, Present Highlights                                       | Chapter 9 & 16   |
| 6    | Oct 7  | Cost Estimation & Review for Mid-Term<br>Exam – Discuss Cost Estimates and<br>Evaluation of Cost Estimates | Chapter 10 & 18  |
| 7    | Oct 14 | Mid-Term   |                  |
| 8    | Oct 21 | Performance Measurement Strategies –<br>Deliver and Present Cost Estimates                                 | Chapter 8 & 13   |
| 9    | Oct 28 | Work Breakdown Structures and Intrgrated<br>Master Schedules – Presentation of<br>Contract Awards          | Chapters 12 & 19 |
| 10   | Nov 4  | Cost Estimating  | Chapters 14 & 15 |
| 11   | Nov 11 | Quality Management – Discuss QM Plan   | Chapter 20       |
| 12   | Nov 18 | Configuration and Data Management –<br>Discuss CM/DM plan  | Chapter 21       |
|      | Nov 25 | Thanksgiving Break – No Class  |                  |
| 13   | Dec 2  | Standards – Discuss Standards Applical to Contracts  | Chapter 22       |
| 14   | Dec 9  | Case Studies of systems from different<br>application areas and review for Final<br>Exam                   | Chapter 23       |
| 15   | Dec 16 | Final Exam   |                  |