SYLLABUS
SYST 530, Section 001 – System Management and Evaluation (72789)
Fall 2010

Instructor:	Dr. Harold Camp
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Office Hours:	3 PM to 4 PM Monday's Café – Manassas 6 PM to 7 PM Wednesdays Jazzman Café – Fairfax 6 PM to 7 PM Thursdays Café -- Manassas Others by appointment
Course Description:	**SYST 530 -- Systems Management and Evaluation:** 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 core competencies for System Engineering Managers. Configuration management, standards, missions, quality, and case studies of systems from different application areas provide the basis for practical application of System Engineering Management principals.
Text:	*"System Engineering Management"*, Benjamin S. Blanchard, Fourth Edition, John Wiley and Sons, 2008. ISBN:978-0-470-16735-9
Grades:	25% - Group Project 20% - Mid-Term Exam 30% - Final Exam 25% - Assignments Late assignments will be penalized 10% per week late.

Examinations:

MidTerm and Final Exams are intended to evaluate the student's knowledge of and ability to apply the information and techniques discussed in the readings and lectures. Be prepared to solve problems by applying the information and techniques discussed in class in concise, intelligible English. You will be expected to apply 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:

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). There are two teams of students; Team A serves as the customer and Team B the supplier. The class will select a system and prepare a Risk Management Plan (complete with risk assessment), System Management Plan, a Project Cost Model, a Performance Evaluation Plan, and a Mission Assurance and Quality plan for that system. In addition, individual students will prepare a Configuration and Data Management plan, Work Breakdown Structure, and other System Engineering Management tools. Other students will research applicable standards and other areas pertinent to System Engineering Management topics. The class as a whole will prepare an Integrated Master Plan and Integrated Master Schedule (IMP/IMS). The instructor approves the system documentation at each stage of the system life cycle prior to proceding to the next stage.

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 second class period after the assignment was assigned (i.e., in two weeks) unless otherwise stated at the time of assignment.

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 August 2010

Week	Class Date	Topics	Reading (Before Class)
1	Sep 1	Introduction, Four Systems, and Group Assignments	**Chapter 1**
2	Sep 8	Risk Management Plan and Risk Analysis, Evaluation, and Mitigation	**Chapter 6**
3	Sep 15	Systems Management Strategies, Design Reviews	**Chapter 5 & Appendix D**
4	Sep 22	System Engineering Program Planning & System Design Strategies	**Chapter 7**
5	Sep 29	Effectiveness of Systems Management Strategies.	**Appendix E**
6	Oct 6	Evaluating System Designs	**Chapters 5**
7	Oct 13	Cost Estimation & Review for Mid-Term Exam – Discuss Cost Estimates and Evaluation of Cost Estimates	**Appendix B**
8	Oct 20	Mid-Term	
9	Oct 27	Performance Measurement Strategies – Deliver and Present Cost Estimates	**Chapter 8**
10	Nov 3	Work Breakdown Structures and Procedures, Processes, Policies	**Chapter 2**
11	Nov 10	Integrated Master Plan/Integrated Master Schedule	**Chapter 2**
12	Nov 17	Mission and Quality Management – Discuss QM Plan	**Chapter 3**
	Nov 24	Thanksgiving Break – No Class	
13	Dec 1	Standards – Discuss Standards Applical to Contracts, Configuration and Data Management – Discuss CM/DM plan	**Chapter 3**
14	Dec 8	Case Studies of systems from different application areas and review for Final Exam	**Appendices A & C**
15	Dec 15	**Final Exam**	

Please note, the classroom is a dynamic environment in which System Engineering Management is not only taught, but practiced. Every attempt will be made to adhere to the above schedule. Lectures are intended to supplement and expand on the textual material, not repeat the reading assignment. Therefore, the wise student will read and attend lectures, seeking opportunities to apply the knowledge from both sources.