SYLLABUS
SYST 571 – Systems Engineering Management
Fall 2009

Instructor: Dr. Peggy Brouse

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Office Hours: Thursdays before class and by appointment

Course Description: **571 Systems Engineering Management (3:3:0)** *Prerequisite: SYST 471 or SYST 530*. Study of more advanced topics in systems engineering management. Seminar style; students are expected to read a number of selections from current literature as well as make presentations and produce papers on engineering management topics. Students will also execute a project involving developing a Systems Engineering Management Plan, a Risk Management Plan, and a Product Assurance Plan for a complex System. Topics include multiproject management (Task Orders, IDIQ, CPAF, CPFF, T&M, and FFP), quality and product assurance programs, independent reviews, risk management, and the impacts of process change on an organization. The class focuses strongly on the practical aspects of various system engineering management techniques and practices on projects, organizations, and personnel. Students will be required to research systems engineering topics and present their findings in class.

Text: Information Technology Project Management, Sixth Edition. Kathy Schwalbe, Ph.D., 2010, Course Technology. ISBN 13: 978-0-324-78692-7

Grades: 40% - Group Project:

- 20% SEMP
- 10% Risk Management Plan
- 10% Product Assurance Plan

30% - Research and Class Presentations
15% - Mid-Term Exam
15% - Final Exam

Group Project

The Group Project is one focal point of student effort within this course. The majority of effort toward the group projects will be expended outside of class, with class time being reserved for lectures, presentations, and reporting on group activities. Each group will produce three systems engineering planning documents; a Systems Engineering Management Plan (SEMP), a Product Assurance Plan (PAP), and a Risk Management Plan (RMP). Criteria and guidance for these documents will be given in class.

Examinations:

Examinations are comprehensive over the lectures. Examinations will be closed book and will test you on the application of principles learned.

Individual Research Paper and Presentations:

Each student will select a relevant systems management topic, research that topic, write a scholarly paper of 8 to 10 pages, 1 1/2 spaced, and present their topic in class.

CLASS SCHEDULE – Fall 2009

Week 1>	3 September	♦ Review course requirements ♦ Lecture: Chapter 1 Introduction to Project Management [48] ♦ **Group: Form and Organize Groups**
Week 2>	10 September	♦ **Professor at Dahlgren** ♦ Lecture: Chapter 2: The Project Management and Information Technology Context [27] ♦ Lecture: Chapter 3 The Project Management Process Groups: A Case Study [25] ♦ Lecture: SE Products [24] ♦ **Group: Give overview of SRS to be used for group project**
Week 3>	17 September	♦ Lecture: Systems Engineering Management Plan [13] and example [20] ♦ Lecture: Chapter 4: Project Integration Management [53] ♦ **Research Paper: topics due**
Week 4>	24 September	♦ Lecture: Risk Management Plan [30] and example [[25] ♦ Lecture: Chapter 5: Project Scope Management [35] ♦ **Group: Program Management Meeting - Present Interim Status**
Week 5>	1 October	♦ Lecture: Chapter 6: Project Time Management [56] ♦ Lecture: Product Assurance Plan [25] and example [15]
Week 6>	8 October	♦ **Exam 1**
Week 7>	15 October	♦ **Professor at Dahlgren** ♦ Lecture: Chapter 7, Project Cost Management [38] ♦ Lecture: Chapter 8: Project Quality Management [64] ♦ **Research Paper: Interim Status**
Week 8>	22 October	♦ Lecture: Chapter 9 Project Human Resource Management [61] ♦ **Research Paper: Interim Status**
Week 9>	29 October	♦ Lecture: Chapter 10: Project Communications Management [45] ♦ **Groups: Turn in SEMP**
Week 10>	5 November	♦ Lecture: Chapter 11 Project Risk Management [60] ♦ **Groups: Turn in RMP Group: Program Management Meeting - Present Interim Status**
Week 11>	12 November	♦ **Professor at Dahlgren** ♦ Lecture: Chapter 12: Project Procurement Management [40] ♦ **Groups: Turn in PAP**
Week 12>	19 November	♦ **Exam 2**
Week 13>	26 November	♦ THANKSGIVING BREAK – no class
Week 14>	3 December	♦ **Research Paper: Final due; final presentations** ♦ **Final project presentations**
Week 15>	10 December	♦ **Professor at Dahlgren** ♦ **Research Paper: final presentations** ♦ **Final project presentations**