

George Mason University

School of Information Technology and Engineering

Rev. 23Feb07

SYST 371-001 Systems Engineering Management

Instructor: Dr Jeffrey E. Humphrey

Lecture: Wednesdays, 4:30-710PM, Rm Robinson B102

Office Hours: Immediately following class or by arrangement

Prerequisite: SYST 210; corequisite: SYST 330

Course objectives: Study of basics of systems engineering management. Includes engineering economics, planning, organizing, staffing, monitoring, and controlling process of designing, developing, and producing system to meet stated need in effective and efficient manner. Discusses management tools, processes, and procedures, including various engineering documentation templates, managerial processes, and dealing with personnel issues. For the first 2/3 of the class the students will individually demonstrate skills with various systems engineering and management tools. The last 1/3 of the semester is focused on a group project – preparing an engineering proposal.

Text: Mantel, Meredith, Shafer, and Sutton, “Project Management in Practice, 2nd Ed. 2005

Semester Schedule:

All assignments due start of class. Please read chapters before they are discussed in class.

Week 1, 24Jan – Review syllabus, In class statistics quiz (not gradable)

Assignment: Take Myers Briggs at <http://www.humanmetrics.com/cgi-win/JTypes> bring printout (due in class 7Feb07)

Week 2, 31Jan – Text Chapter 1 The World of a PM

Assignment: HW Problem Chapter 1 18-23 (due 7Feb07)

Week 3, 7Feb, Text Chapter 2 Manager, Organization, and Team

Assignment: Chapter 2 8, 12, 13 (due 21FEB07)

Week 4, Snow Day!

Week5 21Feb, Text Chapter 3 Planning the Project (WBS)

Assignment: HW Chapter 3 case study John Wiley and Sons (due 28Feb07)

Week 6, 28Feb, Text Chapter 4 Budgeting

Assignment: HW Chapter 4 Use Crystal Ball to do Photostat case problems - 1,2,3 (due 7Mar07)

Week 7, 7Mar, Text Chapter 5 Scheduling

Assignment: HW Chapter 5 25, 27, 28 (due 21Mar07)

Week 8, 14Mar, Spring Break, No Class

Assignment: Have fun, work on exam 1

Week 9, 21Mar, Text Chapter 6 Allocating Resources

Assignment: Take home Exam 1 (due 28Mar06)

Week 10, 28Mar, Text Chapter 7 Monitoring and Controlling Project

Assignment: Start engineering project proposal, team formation starts (teams due 4Apr)

Week 11, 4Apr, Text Chapter 8 Evaluating and Terminating the Project

Assignment: Case Datatech Questions 1,2,3

Week 12, 11Apr, Project status briefings

Assignment: Summary Status

Week 13, 18Apr, Exam 2 (in class exam, chapters 6, 7 & 8), Project status summary only

Assignment: None

Week 14, 25Apr, Project status briefings

Assignment: Summary Status

Week 15, 2May, Presentations I*

Week 16, (Date TBD during final exam week), Presentations II*

Week 16, (Date TBD, during final exam week) lessons learned and course evaluation

* Actual presentation sequence will be by random draw

Grading

10% Homework

20% Exam 1 (take home)

20% Exam 2 (in-class)

30% Final Project Proposal (written report and presentation)

10% Class Participation

10% Lessons learned and team self evaluation

100%

Overall Grade Scale (in % of total available points):

A+ 99-100

A 92-98

A- 90-91

B+ 88-89

B 82-87

B- 80-81

C+ 78-79

C 72-77

C- 70-71

D+ 68-69

D 62-67

D- 60-61

F <60