SYLLABUS

SYST 489 - Senior Seminar

Fall 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) 993-1706
E-mail:	pbrouse@gmu.edu
Office:	GMU: Engineering Building - Room 2215
Office Hours:	Wednesday 3:00 – 5:00 p.m. and by appointment
Course Description:	This course is designed to introduce the students to several important topics in systems engineering, provide additional experience to the students in writing and giving presentations, and obtain feedback on the curriculum for the B.S. in Systems Engineering. Several lectures will be devoted to ethics in systems engineering. Writing and making presentations for systems engineering will also be covered early in the semester. Lecture series presenters will present material that is not part of the required course load to expand the horizons of the students. Each student will write a short paper on each of these presentations. In addition, students will work in teams to critique and redesign the curriculum in Systems Engineering. Each group will deliver a written product and provide at least one briefing to the class. The best critique and redesign will be presented to the faculty.
Course Hours:	Monday and Wednesday 1:30 pm - 2:45 pm in Engineering Building 2211
Text:	1. Introduction to Engineering Communication, 2d edition (2009), Hillary Hart. Pearson Prentice Hall. ISBN 978-0-136044208
	2. Engineering Ethics: An Industrial Perspective (2006), Gail Baura. Academic Press ISBN 978-0-12-088531-2
Grades:	On following pages

Topic	Lecture	Deliverables
Technical Writing	Hart – Chapter 1 – Engineering and Communication [10] Hart – Chapter 2 – Discovering Ideas and Facts [16] Hart – Chapter 3- Organizing Ideas and Facts [8] Hart – Chapter 4 – Writing: It's About Control [20] Hart – Chapter 5 – Displaying Data in Written Documents [23] Hart – Chapter 6 – Revising [17] Hart – Chapter 8 – Producing Engineering Documents	**Individual:** Long paper on bleeding edge technology (20 pages) in IEEE format
Giving Presentations	Hart – Chapter 7 – Do I Really Have to Stand Up and Talk in Front of All Those People [23]	**Individual:** Bleeding Edge Annotated Outline Presentation Bleeding Edge Final Presentation **Group:** Ethics Case Presentation Curriculum Review Draft and Final Presentation
Ethics	Ethics Lecture	**Individual:** Case write-ups (every case except the one your group presents) **Group**: Team presentation and discussion lead. Team paper.
Curriculum Review		**Group**: Determine subject of curriculum review Brief subject Interview professors, students Draft review Final review In-class brief Brief faculty
Technology Review	Attend speaker series lecture	**Individual:** Short paper on lecture attended (3 pages)
Professionalism		**Individual:** Evaluated by instructor

Exact Grade Breakdown

	Individual	
	Ethics - Writeups (5 at 2% each)	10%
	Bleeding Edge Annotated Outline Presentation	5%
	Bleeding Edge Paper Draft	5%
	Bleeding Edge Paper	10%
	Bleeding Edge Final Presentation	5%
	Seminar Review Paper	10%
	Professionalism	10%
	Group	
	Ethics Case Presentation	10%
	Ethics Case paper	10%
	Curriculum Review Subject	5%
	Curriculum Review Draft Presentation/Paper (2.5% each)	5%
	Curriculum Review Final Presentation/Paper (7.5% each)	15%

Writing Intensive Statement

This course fulfills all/in part the Writing-Intensive requirement in the Systems Engineering undergraduate major. It does so through the five ethic write-ups, bleeding edge paper outline, bleeding edge draft paper, bleeding edge final paper and the seminar review paper. The bleeding edge paper will be completed through a draft/feedback/revision process. The due date for each is below; I will provide comments on each.

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

CLASS SCHEDULE

Week 1>	30 August/1 September	♦ Background; Introductions; Honor Code ♦ Group assignments, In-class writing assignment ♦ Present past curriculum review subjects
Week 2>	6 September 8 September	♦ **Labor Day – NO CLASS** ♦ Writing Center Roadshow presentation – Kathy Goodkin ♦ **DEGREE AUDIT ASSIGNMENT – WORTH 2 POINTS** ♦ Blackboard demo
Week 3>	13/15 September	♦ University Career Services 10 minute presentation – Charlotte Strauss ♦ Discussion of Problem Statement and Need Statement ♦ Lecture Hart, Chapter 1 ♦ Lecture: EVMS ♦ Review Research Paper Info sheet ♦ Seminar Review Paper info sheet ♦ Ethics Case Paper info sheet
Week 4>	20 September 22 September	♦ Group work day ♦ Group: 5 min presentation of curriculum review subject
Week 5>	27/29 September	♦ Lecture Hart ♦ Group - Ethics case choices due
Week 6>	4/6 October	♦ Review ABET Objectives and Outcomes ♦ Lecture Hart
Week 7>	12/13 October	• **NO CLASS ON TUESDAY; MONDAY CLASSES MEET ON TUESDAY** • Lecture Hart
Week 8>	18/20 October	♦ Individual: 5 min presentations on bleeding edge paper (annotated outline) ♦ Individual: Write up (annotated outline) on bleeding edge paper due
Week 9>	25/27 October	♦ Lecture: Ethics ♦ Group Work Days on Ethics Cases and final paper
Week 10>	1/3 November	♦ Group Presentation: Ethics Case 1 ♦ Group Presentation: Ethics Case 2 ♦ Individual: Write up (draft paper) on bleeding edge paper due
Week 11>	8/10 November	♦ Work day on Curriculum Review ♦ Group Presentation: Ethics Case 3
Week 12>	15/17 November	♦ Group Presentation: Ethics Case 4

		♦ Group Presentation: Ethics Case 5
Week 13>	22/24 November	♦ Group: 5 min presentation of curriculum review draft ♦ Group: Write up (draft) on curriculum review due ● **NO CLASS ON THURSDAY; THANKSGIVING**
Week 14>	29 November/ 1 December	♦ Walkthrough of curriculum review ♦ Group: Presentation to faculty on curriculum review (everyone attends)> will be coordinated with SYST490 presentations to faculty ♦ Group: Final curriculum review due
Week 15>	6/8 December	♦ Individual: Presentations of bleeding edge paper ♦ Final bleeding edge paper due ♦ Individual: short paper on lecture attended due ♦ Individual: Evaluation of Others in Group due

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)

- 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