

**ESI 4356 – SPREADSHEET BASED DECISION SUPPORT SYSTEMS (section 3763)
SPRING 2012**

1. **Catalog Description:** Applications of decision support systems in industrial and systems engineering; Developing and implementing decision support systems arising in industrial and systems engineering using popular database management and spreadsheet software; Microsoft Excel; Visual Basic for Excel. (3 credits).
2. **Pre-requisite:** COP 2271 (Computer Programming for Engineers) or equivalent.
Co-requisite: ESI 4312 (Operations Research 1) or equivalent.
3. **Course Objectives and Outcomes:** The objectives of the course are (i) to demonstrate to students the usefulness of decision support systems arising in the practice of industrial and systems engineering; (ii) to enable them to design, develop, and implement integrated decision support systems for industrial and systems engineering applications.
4. **Contribution of course to meeting the professional component:** This is a course with design content. Throughout the semester, students will complete a team project expected to meet specific design criteria.
5. **Instructor**
 - a. **Office location:** 415 Weil Hall
 - b. **Telephone:** 392 1464 ext. 2014
 - c. **E-mail address:** kirli@ise.ufl.edu
 - d. **Web site:** Sakai (lss.at.ufl.edu)
 - e. **Office hours:** MF 8th period
6. **Teaching Assistants**
 - a. **Office location:** 202 Weil Hall
 - b. **E-mail address:** posted on the course web-site
 - c. **Office hours:** posted on the course web-site
7. **Meeting Times and Location:** MF 6-7, TUR 2349
8. **Material and Supply Fee:** N/A
9. **Textbook and Software**
 - a) Microsoft Excel 2007 or 2010 (required)
 - b) “*Developing Spreadsheet-based Decision Support Systems*” by Michelle M. H. Seref, Ravindra K. Ahuja and Wayne L. Winston (recommended)
 - c) Handouts and PowerPoint slides are available on the course web-site.
10. **Computer Requirement:** You must have a notebook computer to sign up for this course. The notebook computer is necessary for the in-class exercises and exams. Homeworks will be submitted via the E-learning web-site.
11. **Attendance and Expectations:** Attendance is not required, but strongly recommended. It will be to your benefit to attend all lectures. You will be responsible for everything covered in class even if it is not in the textbook. There may be pop quizzes as well.

Lectures are there to facilitate efficient learning, not chatting with friends, surfing the net, reading the Alligator, or sleeping. You should be focused on the course material, not on activities that do not involve course work. Those who behave inappropriately will be asked to leave. If you feel like you cannot follow the lecture anymore, you can leave the classroom

quietly; I will not be offended. Please remember to turn off your cell phones as soon as you enter the classroom.

- 13. Grading Policy:** Your grade will be based on two in-class exams, four (may change) homeworks and a term project. There may also be quizzes. Homeworks may be weighted unequally.

Exams (25% each)	50%
Homeworks and Quizzes	20%
Term project	30%
Total	100%

14. Grading Scale:

There may or may not be a curve at the end of the semester. This of course depends on the overall performance of the class throughout the semester. Please keep in mind that A is not your birth-right. In fact, the percentage of As in this course have historically been in the 20-25% range. You have to study very hard and perform well in order to deserve an A.

<i>Grade</i>	<i>Range</i>
A	90-100
A-	88-90
B+	86-88
B	80-86
B-	78-80
C+	76-78
C	70-76
C-	68-70
D+	66-68
D	60-66
D-	58-60

A C- will not be a qualifying grade for critical tracking courses. In order to graduate, students must have an overall GPA and an upper-division GPA of 2.0 or better (C or better). Note: a C-average is equivalent to a GPA of 1.67, and therefore, it does not satisfy this graduation requirement. For more information on grades and grading policies, please visit: <http://www.registrar.ufl.edu/catalog/policies/regulationgrades.html>

15. Term project Guidelines: You will work in teams of 4-5 students. At the end of the semester, you will evaluate and be evaluated by your teammates. Your grade will be based not only on your team score but also on your teammates' evaluations of you.

Project development will take place in stages with specific deadlines. The deadlines below are tentative and are subject to change with notice.

<i>Project Stage</i>	<i>Deadline</i>
Team Selection	February 24
Project Meeting	March 16
Project Meeting	March 23
Project Meeting	April 13
Final Submission	April 22
Presentation	April 23

16. Course Outline

<i>Week</i>	<i>Topic</i>	<i>Chapter</i>
1	Referencing and Names & Functions And Formulas	3-4
2	Functions And Formulas & Charts	4-5
3	Pivot Tables & Statistical Analysis	6-7
4	Excel Solver & Simulation	8-9
5	Working with Large Data & Intro to VBA & Macros	10-11-12
6	Exam-1 & Objects	13
7	Variables & Procedures & Flow Control	14-15-16
8	Data Structures & Classes	17
9	-- <i>Spring Break</i> --	
10	User Interface & Classes	18
11	Project Meeting	
12	Project Meeting	
13	Exam-2 & Project Work	
14	Project Meeting	
15	Project Work	
16	Presentations	

17. Make-up Exam Policy: Students needing a make-up exam due to schedule conflicts must notify the instructor at least one week before the day the exam is scheduled for.

- 18. Exams:** There will be two exams, each of which will be worth 25% of your final grade. The exams will be comprehensive, covering all the topics discussed up to that point. In each exam, I will include a few challenging tasks, which only the best students will be able to answer. These are the questions that separate A students from the rest.
- 19. Honesty Policy:** All students admitted to the University of Florida have signed a statement of academic honesty committing themselves to be honest in all academic work and understanding that failure to comply with this commitment will result in disciplinary action. This statement is a reminder to uphold your obligation as a UF student and to be honest in all work submitted and exams taken in this course and all others.
- 20. Accommodation for Students with Disabilities:** Students requesting classroom accommodation must first register with the Dean of Students Office. The Dean of Students Office will provide documentation to the student who must then provide this documentation to the instructor when requesting accommodation.
- 21. UF Counseling Services:** Resources are available on-campus for students having personal problems or lacking clear career and academic goals. The resources include:
- University Counseling Center, 301 Peabody Hall, 392-1575, Personal and Career Counseling.
 - SHCC mental Health, Student Health Care Center, 392-1171, Personal and Counseling.
 - Center for Sexual Assault/Abuse Recovery and Education (CARE), Student Health Care Center, 392-1161, sexual assault counseling.
 - Career Resource Center, Reitz Union, 392-1601, career development assistance and counseling.
- 22. Software Use:** All faculty, staff and student of the University are required and expected to obey the laws and legal agreements governing software use. Failure to do so can lead to monetary damages and/or criminal penalties for the individual violator. Because such violations are also against University policies and rules, disciplinary action will be taken as appropriate. We, the members of the University of Florida community, pledge to uphold ourselves and our peers to the highest standards of honesty and integrity.