ESI 4357 WEB-BASED DECISION SUPPORT SYSTEMS (section 7713)
SPRING 2012

1. **Catalog Description:** The ability to extract data from databases and embed analytical decision models within larger systems are some of the most valuable skills required for students entering today's IT dominated workplace. This course will teach how to use IT tools to develop decision support systems arising in the practice of IE/OR/Management and to make them web-enabled. (3 credits).
2. **Prerequisite:** COP 2271 (Computer Programming for Engineers) or equivalent.
3. **Corequisite:** ESI 4312 (Operations Research 1) or equivalent.
4. **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 illustrate to students the essential concepts in database design; (iii) to teach them popular database management systems; and (iv) to enable them to design, develop, and implement integrated decision support systems for industrial and systems engineering applications using latest available IT tools.
5. **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.
6. **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
7. **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
8. **Meeting Times and Location:** TR 4-5, FAC 0127
9. **Material and Supply Fee:** N/A
10. **Textbook and Software Required**
    a. *"Developing Web-Enabled Decision Support Systems"* by Abhijit A. Pol and Ravindra K. Ahuja.
    b. Microsoft Visual Studio .NET 2010, downloadable from the MSDNAA website.
    c. Other course materials, including lab instructions, lab assignments and homeworks can be downloaded from the course website.
11. **Computer Requirement:** You must have a notebook computer to sign up for this course. The notebook computer is necessary for in-class exercises and exams. Homeworks will be submitted online; exams will be submitted online and/or in a CD or a USB drive.
12. **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, five (may change) homeworks and a term project. There may also be quizzes. Homeworks may be weighted unequally.

Exams (20% 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.

Grade	*Range*
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.

Project Stage	*Deadline*
Team Selection	February 23
Project Meeting	March 27
Project Meeting	April 5
Project Meeting	April 17
Final Submission	April 22
Presentation	April 23-24-25

16. Course Outline

Week	***Topic***	***Chapter***
1	Introduction & Entity-Relationship	3
2	Relational Data Modeling & Normalization	4
3	Access & Queries	5-6-7-8
4	Queries & SQL & Web Introduction	8-9-17
5	**Exam-1** & Web Applications with ASP.NET	18
6	Database Connectivity in Web Applications	19
7	Authentication & Authorization	
8	Advanced Database Connectivity in Web Apps	
9	*-- Spring Break --*	
10	Advanced Database Connectivity in Web Apps	
11	**Exam-2** & Project Work	
12	Project Meeting	
13	Project Meeting	
14	Project Work	
15	Project Meeting	
16	Project 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 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.