ESI4357 – WEB BASED DECISION SUPPORT SYSTEMS
FALL 2015

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. (4 credits).

2. Pre-requisites

COP 2271 (Computer Programming for Engineers) or equivalent.
ESI 4312 (Operations Research 1) or equivalent.

3. Course Objectives and Outcomes

(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;

(iv) understand the issues that arise in the conceptual development and implementation of effective and user friendly decision support systems.

(v) 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 significant design content. Throughout the semester, students will complete a team project expected to meet specific design criteria.

5. Instructor

a. Office location: 302-B Weil Hall

b. Telephone: 392-1464 ext. 2014

c. E-mail address: kirli@ise.ufl.edu

d. Web site: E-learning (lss.at.ufl.edu)

e. Office hours**:** MW 7th period

6. Student Assistants

a. Office location: 202 Weil Hall

b. Office hours: posted on the course web-site on E-learning

7. Meeting Times and Location

T 6-7 periods, FLG 265
R 7-8 periods, WEIL 234

8. Material and Supply Fee

None

9. Textbook and Software

a. Microsoft Visual Studio .NET 2012, downloadable from the MSDNAA website.

b. Other course materials, including instructions, exercises and homeworks can be downloaded from the course website.

c. *"Developing Web-Enabled Decision Support Systems"* by Abhijit A. Pol and Ravindra K. Ahuja (optional)

10. Computer Requirement

You must have a laptop computer to sign up for this course. The laptop computer is necessary for in-class exercises and exams. Homeworks and exams will be submitted online.

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.

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.

12. Grading Policy

Your grade will be based on three in-class exams, two homeworks and a team project.

Exams	50%
Homeworks	10%
Term project	40%
Total	100%

13. Submission of Assignments

All assignments must be submitted via E-learning unless specified otherwise. Assignment deadlines are rigid. **If you do not submit before the deadline or submit the wrong file, you will receive a zero.** Only the instructor has the authority to grant late submissions.

Grade disputes must be made to the instructor within 10 days after the grades are posted. Any grade dispute after the specified period will not be considered.

14. 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. Please do not ask for a make-up exam to attend a job interview.

15. 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 an A is not your birth-right. In fact, the percentage of As in this course have historically been in the 10-20% range. You have to study very hard and perform well in order to deserve an A.

Grade	Range
A	[93-100]
A-	[90-93)
B+	[87-90)
B	[83-87)
B-	[80-83)
C+	[77-80)
C	[73-77)
C-	[70-73)
D+	[67-70)
D	[63-67)
D-	[60-63)

A C- will not be a qualifying grade for required 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

16. Team Project Guidelines

You will work in teams of 7-8 students. At the end of the semester, you will evaluate your teammates and you will be evaluated by them. 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	Date
Team Selection	November 2
Project Meeting	November 10
Project Meeting	November 19
Project Meeting	December 4
Final Submission	December 8
Presentation	December 10-15

17. Course Outline

Week	Topic
1	Introduction & Entity-Relationship
2	Relational Data Modeling & Normalization
3	Table Design & Queries
4	SQL & **Exam-1**
5	Intro to Web Apps with ASP.NET
6	Database Connectivity in Web Applications
7	Authentication & Authorization & **Exam-2**
8	User Interface Design
9	Optimization
10	Optimization & **Exam-3**
11	DSS Design Principles & Project Work
12	Project Meeting & Project Work
13	Project Work & Project Meeting
14	Project Work & *Thanksgiving*
15	Project Work & Project Meeting
16	Project Deadline & Presentations

18. 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.

19. 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.

20. 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.

21. 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.