University of Kentucky
School of Information Science (SIS)

[ICT/IS 303-201][Systems Analysis]
[Fall 2015/2015]
[August 26, 2015 – December 18, 2015]

Instructor

Sherali Zeadally
Associate Professor
315 Little Library Building
Email : szeadally@uky.edu
Phone: 859-218-2299
Preferred method of contact: Email

Office Hours

- Tuesdays: 12.30 PM to 3 PM
  Thursdays: 12.30 PM to 3 PM
- How to contact me for an appointment:
  Email
- Maximum time frame for response:
  Will respond as soon as possible
  Maximum: 12 hours any day of the week including weekends
- Office Hours:
  I am available anytime by email. I am also available in the office anytime if a prior arrangement is made

Class Information

- ONLINE
- During office hours, please connect to:
  connect.uky.edu/zeadally
- Final exam date and time
  December 15, 2015

COURSE INFORMATION

Course Description

IS 303 – Systems Analysis
This course examines and applies the principles of information systems analysis. It surveys project management, feasibility and analysis, systems requirement definition and resource allocation. It utilizes a structured systems development methodology that spans the entirety of the information system lifecycle, which starts with the conception of the need for a specific information system and ends with the implementation of that system. The course utilizes a case study approach in which students initiate the analysis and logical design of a limited-scope information system.

Course Objectives

- Provide a solid understanding of the fundamental principles of information systems and system analysis.
- Enhance critical thinking skills using scenario-based tasks to help students develop organization, analysis, problem-solving, and decision-making skills they can apply in the workplace.
- Provide an understanding of some of real-life ethical issues in an Information Technology (IT) environment.

Course Overview

- Describe and explain the various components of the entire information system lifecycle spanning from logical design to system implementation.
- Compare structured, object-oriented, and agile development methods.
- Introduce project management concepts early in the systems development process including explanations of project management tools and techniques.
- Explain how IT supports business requirements and recent major IT trends.

Course Outline

The course will cover the following areas:

- *Systems planning* which includes an introduction to system analysis and design, business case analysis, and the management of system projects.
- *System analysis* which includes requirements/data/process/object modeling and development strategies.
- *System design* which includes user interface/data design and system architecture.
- *System implementation* and *security* which cover managing the implementation of systems and their security.

Required Reading

Reference Textbook: Harry Rosenblatt, Systems Analysis and Design, Tenth Edition ISBN: 978-1-285-17134-0. Lecture notes will be provided to all students on a weekly basis throughout the semester.

STUDENT EVALUATION

Grading Parameters

- **3** projects: 45%
- **2** Homework assignments: 10%
- **2** quizzes (15%)
- Midterm exam (15%) [covers the first half of the course]
- Final exam (15%) [covers the second half of the course]. However, the instructor reserves the right to retest on material that was not appropriately understood. Such material will be highlighted before the final exam

Grading Rubric (See Submission of Course Assignments for details)

- Late assignments are only acceptable under exceptional circumstances or if the instructor has been notified ahead of time. For all other cases, submissions handed in after the submission deadline will be assessed with a penalty of 5% per day.
- Submitted work which does not conform to the required standard (in terms of file format, line spacing, grammar, etc.) as set in the "Submission of Course Assignments" in this syllabus will be graded with points taken off accordingly.

Grading Scale

[90% – 100%] = **A (Exceptional Achievement)**
[80% – 89%] = **B (High Achievement)**
[70% – 79%] = **C (Average Achievement)**
[60% – 69%] = **D (Below Average Achievement)**
[0% – 59%] = **E (Failing)**

Absences/Attendance

The instructor's policies on academic integrity, excused absences, incompletes, accommodations due to disability are described in the general course policies of SIS described at http://ci.uky.edu/lis/sites/default/files/policies.pdf

Submission of Course Assignments

- All assignments and project reports must be submitted electronically.
- All times specified for submission deadlines are Eastern Standard Time (EST).
- All submitted work must be typed [12 point, Time Roman, single line spacing, 1 inch margins] using **Microsoft WORD (.doc, .docx, .rtf)** and be thoroughly spellchecked and free of grammatical mistakes.

- All files submitted must have the following text "**firstname_lastname<day-month submitted>"** as part of the filename.
- All sources used during the preparation of all submitted works must be clearly identified in a separate list of ordered [e.g., [1], [2], [3], etc.] references (in a **Reference** section placed after the main document). These references must be cited within the text of the submission where appropriate.

Group Work and Collaboration

All assignments should be undertaken individually. For projects requiring group work, detailed instructions will be outlined in the project description. When group work is performed, each member of the group must state his/her contributions very clearly and all members of the group must agree on each member's contributions before the start of the project and inform the instructor (in writing) about the expected efforts of each member of the group.

TECHNOLOGY INFORMATION & RESOURCES

Distance Learning Students are expected to have a minimum level of technological acumen and the availability of technological resources. Students must have regular access a computer with a reliable Internet connection and audio capabilities. Internet Explorer 7 (IE) or Firefox 2.x are the recommended browsers for those using a Windows-based PC. Those using Firefox 3.x may encounter problems with assignment uploads. Those using an Apple computer with MAC OS X (10.5.x) may use Firefox 3.x or Safari 3.x.

Please be certain that your computer and/or browser allow you to view Adobe Reader documents (.pdf). Microsoft Office and other software products are free for students: http://www.uky.edu/ukat/techtips/faculty/software-downloads

As your instructor, I am your first go-to person for technology problems. If you need more immediate assistance, please contact UKIT.

Information Technology Customer Service Center (UKIT)
http://www.uky.edu/UKIT/; 859-218-4357

Library Services

Distance Learning Services

http://www.uky.edu/Libraries/DLLS

- Carla Cantagallo, DL Librarian
- Local phone number: 859 257-0500, ext. 2171; long-distance phone number: (800) 828-0439 (option #6)
- Email: dllservice@email.uky.edu
- DL Interlibrary Loan Service: http://libraries.uky.edu/ILL

Course Reserves

http://infokat.uky.edu/vwebv/enterCourseReserve.do

GENERAL COURSE POLICIES

Policies concerning academic integrity, excused absences and academic accommodations due to disability are available online at:
http://ci.uky.edu/lis/sites/default/files/policies.pdf

Military Members and Veterans

We recognize the complexities of being a member of the military community and also a student. If you are a member of the military or a military veteran or dependent, please inform your

instructor if you are in need of special accommodations. Drill schedules, calls to active duty, mandatory training exercises, complications with GI Bill disbursement, and other unforeseen military and veteran related developments can complicate your academic life. If you are aware of a complication, we will work with you and put you in contact with university staff members who are trained to assist you. Please contact Tony Dotson, Coordinator of the University of Kentucky Veterans Resource Center at (859) 257-1148 for additional assistance. Visit http://www.uky.edu/veterans for more available resources.

COURSE CALENDAR [All times below: **EST**]

Lecture Material, Homework Assignments, Quizzes, Projects, Exams	
Lecture Material	Posted ***weekly*** on blackboard
Homework Assignments	Due 6 PM on the following dates: September 17, November 12
Quiz 1	September 22, 2015
Project 1	Due 6 PM on September 24, 2015
Project 2	Due 6 PM on October 29, 2015
Mid-term exam	**October 19, 2015**
Quiz 2	November 12, 2015
Project 3	Due 6 PM on December 3, 2015
Final exam	**December 15, 2015**

NOTE: Please contact me as early as possible to make the appropriate arrangements in case you cannot take the quizzes or exams on the dates specified above.

Tentative topics to be covered in this course include:

Week 1	Overview of systems analysis and design	
Week 2		
Week 3	Analysis of the business case	
Week 4	Management of systems projects	
Week 5	Requirements Models	Project 1 due
Week 6	Domain Modeling – data and process modeling	
Week 7		
Week 8	Object Modeling	
Week 9		**Midterm exam**
Week 10	System development approaches	Project 2 due
Week 11	Essentials of design	
Week 12	Design of user interfaces	
Week 13	Data design	
Week 14	Components of system architecture	*Thanksgiving holidays [November 25-28, 2015]*
Week 15	Components of system architecture Management of systems implementation	Project 3 due
Week 16	System support and security, current trends in	

	system development	
Week 17		**Final exam**

Lecture notes cover important materials that need a thorough understanding by the students. Homework assignments are intended to reinforce the material in the text and will often require external materials outside the book to be consulted. Quizzes will help ensure students stay up with the materials being taught. Midterm and final exams may be preceded by short reviews of the materials to be tested.

COURSE ASSIGNMENTS

The homework assignments will help reinforce the understanding of the fundamental concepts, key terms, techniques, etc that have been covered by the lecture materials. The hands-on projects will require students to apply their knowledge and skills to design solutions and answer questions of varying difficulty for realistic business scenarios. In addition, as part of the homework assignment or project, students will often need to develop their critical thinking skills for given realistic scenarios: they must be able to identify the problem, analyze the options available, and develop an appropriate solution to meet the requirements of the given project scenario.

Homework Assignments and Projects	Due Dates
Homework Assignments	Due 6 PM on the following dates: September 17, November 12
Project 1	Due 6 PM on September 24, 2015
Project 2	Due 6 PM on October 29, 2015
Project 3	Due 6 PM on December 3, 2015

As mentioned earlier in the syllabus, all assignments and project reports must be submitted electronically by the date and time due.

NOTE: This syllabus may be changed at any time at the discretion of the instructor.