

# Advanced Systems Analysis and Design Course Syllabus



Course No:BA 382Semester:Fall 2009Units:3Class hours:Monday 9:00 – 11:45 amClass Room:404

| Instructor:          | Prof. Leonid Romanyuk    |
|----------------------|--------------------------|
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| <b>Office Hours:</b> | MTW 11:50-12:25          |
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# **COURSE DESCRIPTION:**

An in depth examination from a business, rather than a technology, perspective of the methodologies, models, and tools used in the analysis and design of modern business information systems. The topics will include the systems development environment and the origins of software, traditional and objectoriented system analysis and design, data analysis and database design, usability, development of distributed and Web-based systems, implementation and maintenance of information systems. Numerous case studies and mini projects with the use of prepackaged application software and CASE tools. This class includes 15 hours of independent lab work. (3 units) Prerequisite: BA 262 or BA 381.

### **LEARNING OBJECTIVES:**

To introduce students from a business, rather than a technology, perspective to the concepts, skills, methodologies, techniques, tools, and perspectives essential to successfully develop information systems. The students will learn about the systems development environment and the origins of software, learn the skills for managing the information systems project, identifying, selecting, initiating, and planning systems development projects, determining system requirements, structuring system process, logic, and data requirements. The students will learn how to design databases, forms, reports, interfaces, dialogues, and finalize design specifications, how to design distributed and the Internet systems, and how to implement and maintain information systems.

# **INSTRUCTIONAL METHODS:**

Lecture method is used in combination with the practical use of the Internet and system development software tools to solve analysis and design problems. The emphasis will be on learning by doing. Every student must participate in an intensive classroom activity. Reading, writing, "business case study", and project assignments will be made throughout the course.

#### **REQUIRED MATERIALS:**

| TEXTBOOK: | <b>Modern Systems Analysis and Design,</b> 5th Edition, by Jeffrey Hoffer,<br>Joey George, Joseph Valacich, Prentice Hall, 2008, ISBN: 0132240769 |
|-----------|---|
| OPTIONAL: | Publisher's Web resources at <u>http://www.prenhall.com/hoffer/</u>   |

#### **REQUIREMENTS:**

All students are required to attend the class. Continuous assessment is emphasized. Written or oral quizzes will be given every week. Students must complete all assignments and take all quizzes, mid-term exam and final exam ON THE DATES DUE. Talking in class, using cell phones, coming late, leaving the room at times other than at break time is not allowed. Plagiarism/cheating will result in the grade "F" and a report to the administration.

#### **TESTING:**

| Classroom activities     | every week   | 10% |
|--------------------------|--------------|-----|
| Quizzes                  | every week   | 10% |
| Assignments and Projects | every week   | 30% |
| Mid-term exam            | 10/14/09     | 20% |
| Final exam               | as scheduled | 30% |

There will be no make-up for a missed quiz or participation in a classroom activity. No make-up exams will be given unless you have the instructor's **prior** approval obtained in person **before** the exam date, with the exception of an extreme emergency. Late assignments will get no credit or reduced credit. *Students will not be allowed to use computers or cellular phones during tests.* 

# **GRADING:**

Less than 60% total is an "F"; 75% total is "C+". Other grades will be calculated "on the curve" from the scores above.

# **COURSE SCHEDULE:**

Weekly schedule of topics is attached. Students should read every chapter of the textbook on the topic to be discussed in class before they come to class. Be ready to answer in writing all review questions at the end of the chapter.

#### **ASSIGNMENTS AND PROJECTS:**

Case studies, mini projects and other assignments will be given every week. Take a folder and create a Project Notebook. You will put in this folder printouts of the results of all your assignments and projects and storage media (floppy disk / CD disc / DVD disc / USB flash drive) with your work stored on it. The instructor can ask you to turn in this folder and grade your work at any time during the semester.

#### **MODIFICATION OF THE SYLLABUS:**

This syllabus was updated on September 3, 2009. The instructor reserves the right to modify this syllabus at any time during the semester. An announcement of any changes will be made in a classroom.

# FALL 2009 SCHEDULE OF TOPICS AND REQUIRED READING

<u>Read every chapter on the topic to be discussed in class before you come to class.</u> <u>Be ready to answer in writing all review questions at the end of the chapter.</u>

| Date     | Topics   | Chapter          |
|----------|--|------------------|
| 8/24/09  | The Systems Development Environment                    | 1                |
| 8/31/09  | The Origins of Software                                | 2                |
| 9/07/09  | Labor day (Holiday                                     |                  |
| 9/14/09  | Managing the Information Systems Project               | 3                |
| 9/21/09  | Identifying and Selecting Systems Development Projects | 4                |
| 9/28/09  | Initiating and Planning Systems Development Projects   | 5                |
| 10/05/09 | Determining System Requirements                        | 6                |
| 10/12/09 | Structuring System Process Requirements<br>Review      | 7                |
| 10/19/09 | MIDTERM EXAM<br>Structuring System Logic Requirements  |                  |
| 10/26/09 | Structuring System Data Requirements                   | 9                |
| 11/02/09 | Designing Databases                                    | 10               |
| 11/09/09 | Designing Forms and Reports                            | 11               |
| 11/16/09 | Designing Interfaces and Dialogues                     | 12               |
| 11/23/09 | Finalizing Design Specifications                       | 13               |
| 11/30/09 | Designing Distributed and Internet Systems             | 14               |
| 12/07/09 | System Implementation and Maintenance<br>Review        | 15 -16<br>1 - 16 |
| 12/14/09 | COMPREHENSIVE FINAL EXAM                               | 1 - 16           |