

ITK261 SYSTEMS ANALYSIS AND DESIGN - FALL 2007
SECTION 3

School of Information Technology, Illinois State University

INSTRUCTOR: Kyoungwon (Ben) Suh

CONTACT INFORMATION:

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Office hours: Tues/Thurs 10:00-11:30 AM, or by appointment

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Communication with Instructor: Students may communicate directly with me by e-mail.

Section 3
Time: TR 6:30-7:45 PM
Location: Stevenson Hall 108

Course Web Site: We will use my personal web site for ITK 178 (<http://www.itk.ilstu.edu/faculty/kwsuh/courses/itk261fall07>) tentatively. In a few weeks, the course web site will be migrated to Blackboard/WebCT CE 6.0 (<http://blackboard.ilstu.edu>).

ITK 261 PREREQUISITE: C or better in ITK (178 or 179, or 277) and ITK (254 or 225) required. Major/minor only or consent of department advisor required.

Course Objectives: The overall course objective is to give you the concepts and skills you need to analyze and design information systems. Upon successful completion of the course, you are expected to be able to:

- Describe the different types of work (analysis, design, construction, management) and skills required in systems development projects.
- Understand the Systems Development Life Cycle (SDLC), its typical phases and tasks.
- Describe major systems development methodologies, including structured and object-oriented methodologies.
- Describe and carry out the activities required in systems development.
- Understand relational database concepts and be able to design a simple relational database.
- Model system components and user requirements using data models, functional decomposition diagrams, data flow diagrams, decision tables and decision trees.
- Model system components and user requirements using case diagram, class diagram, and other object-oriented techniques.
- Use appropriate tools (CASE) to create various systems development deliverables.

Textbook:

Satzinger, John W., et al., "Systems Analysis and Design in a Changing World." Course Technology, 4th Edition, 2006.

Note: The instructor may also assign outside reading from various resources.

Grading Criteria:

ISU Grading System:

A = Excellent	90-100%
B = Good	80-89%
C = Satisfactory	70-79%
D = Poor, But Passing	60-69
F = Failing	< 60%

Tentative Course Schedule:

W	Date	Topics	Text readings & Assignments
1	Aug 21	Course Introduction Skills of Systems Analyst	Chapter 1
	Aug 23	Concepts of Information Systems Types of Information Systems	Chapter 1
2	Aug 28	Strategic Planning and SDLC	Chapter 1 & 2
	Aug 30	Systems Development Methodologies	Chapter 2
3	Sep 4	Producing Project Schedule	Chapter 3
	Sep 6	Continue Project Scheduling & Cost/Benefits Analysis	Chapter 3
4	Sep 11	Cost/Benefits Analysis	Chapter 3
	Sep 13	Wrap up and Discussion	Assignment #1(6%) Due (in class)
5	Sep 18	In-class Exam I: Chapter 1-3 (20%)	
	Sep 20	Exam Results and Discussion	
6	Sep 25	Types of Models, Events, and Event Tables	Chapter 5
	Sep 27	E-R Diagram vs. Class Diagram	Chapter 4,5
7	Oct 2	Traditional Approach Traditional Analysis	Chapter 6 (excludes p.226-234)
	Oct 4	Traditional Analysis	Chapter 6 (excludes p.226-234)
8	Oct 9	Traditional Analysis/Design	Chapter 6 (excludes p.226-234)
	Oct 11	Traditional Design	Chapter 10
9	Oct 16	Traditional	Chapter 10
	Oct 18	Relational Database	Chapter 12 (excludes p.457-477)
10	Oct 23	Wrap-up and Discussion	Assignment #2(7%) Due (in class)
	Oct 25	In-class Exam II: Chapter 4, 5, 6, 10 (25%)	
11	Oct 30	Exam Results and Discussion	
	Nov 1	Relational Database Normalization	Chapter 12 (excludes p.457-477)
12	Nov 6	Object-Oriented Approach Object-Oriented Analysis	Chapter 7
	Nov 8	Object-Oriented Analysis	Chapter 7
13	Nov 13	Object-Oriented Analysis	Chapter 7
	Nov 15	Object-Oriented Design	Chapter 11
14	Nov 20	Thanksgiving Vacation	
	Nov 22		
15	Nov 27	Object-Oriented Design	Chapter 11
	Nov 29	Object-Oriented Design	Chapter 11
16	Dec 4	Object-Oriented Design	Chapter 11
	Dec 6	Wrap-up and Discussion	Assignment #3(7%) Due (in class)
	Final Exam	In-class Final Exam Covers Chapter 7, 11, 12 (25%)	Section 3: Dec 13 5:30PM-7:30PM

Grading Distribution:

Exam I	Planning Phase	20%
Exam II	Traditional Systems Analysis and Design	25%
Exam III	O-O Systems Analysis and Design	25%
Individual Assignments		20%
Key Terms Quizzes (in-class)		10%

Borderline grades (within 1% range) will take into consideration of attendance and participation in class, effort shown in completing class assignments, results from subsequent exams, and bonus reading quizzes. Visit Blackboard/WebCT CE 6.0 to view your performance and grades.

Course Policies

Expectations

You are expected to spend at least **10 hours/week beyond classroom hours**: actively reading and comprehending class material, doing assignments and exercises, etc. The amount of time devoted to this class depends on your ability to understand and to comprehend the material. You are also expected to finish reading for a particular chapter before coming to class.

In addition, you are expected to be familiar with Blackboard/WebCT, which can be assessed via <https://blackboard.ilstu.edu>. All class lectures, assignments, and additional readings are posted on Blackboard/WebCT. You can login to the Blackboard/WebCT with your ULID and password. For your overall performance and grades, you can visit Blackboard/WebCT.

Preparation and Attendance

1. You are expected to attend all classes. Attendance and quizzes will be taken and can impact your grade (10%). You are responsible for all material covered in class and for all readings, handouts, and assignments made or given during these times.
2. If you miss class, YOU are responsible for being prepared for the next class. Arrange to find out what was covered from another student. Exchange names and phone numbers with a couple of your classmates in anticipation of this. After having made an effort to learn the missed material, see me with any questions or for help on confusing points.
3. The class periods will not usually present in detail the material and examples from the readings. Instead the class periods can be used to work examples applying the material, to clarify and discuss important points, and to summarize the material. It is recommended that you go over the assigned readings a second time after each topic is covered in class to achieve more depth of understanding.

Assignments (20%)

1. A number of assignments will give you the opportunity to practice systems development activities and master the course material. Completing these exercises will help you get the most from the class.
2. Grades of your assignments are based on:
 - your ability to answer and analyze the issues/problems
 - your ability to utilize and integrate the knowledge based on the lecture and textbook readings
 - your ability to present a clear, logical, and well-written answers and/or solutions
3. All assignments are due at the start of class on the due date specified. You will be given more than enough time to complete an assignment; therefore, late submissions will not be accepted. Please constantly check your class syllabus and calendar for deadlines. Mark your calendar for due dates. Late work will be not accepted after the assignment results or answers have been discussed in class. Turn your work in as soon as possible.
4. All submissions must be in hard copies. Electronic submissions will NOT be accepted.
5. Individual assignments are not team-based activities. Therefore, you may not discuss your assignment with other students. Doing so is considered cheating (see Academic Dishonesty Policies for penalty). If you have any questions or concerns regarding your assignments, please find time to see me.

Key Terms Quizzes (10%)

The objectives of key terms quizzes are 1) to familiarize yourself with the jargons used in our profession, 2) to create better discussions and understanding during lectures, and 3) to motivate you to read and comprehend your textbook.

1. Key-terms quizzes (matching) will not be announced ahead of time. You are responsible for keeping up to date on assigned readings and past lectures. These quizzes cover the key terms taken from the chapters in your textbook.
2. Each quiz has 20 matching questions. You are given 10 minutes to complete each quiz.

Make-Ups Exams or Quizzes

1. All quizzed missed due to skipping class will receive an automatic zero. In addition, attendance and quizzes will count 10% of your final grade. There will be NO make up quizzes.
2. Makeup exams will only be given under extenuating and unavoidable circumstances that are documented through the undergraduate catalog and validated by the instructor.
3. The instructor may decide to either allow a makeup exam with penalty, a makeup without penalty, or deny a makeup, depending on the reason and the promptness of an official notice. It is your responsibility to pursue contact with the instructor until this is resolved. Prompt contact will minimize the potential impact on your grade. Expect to document the reason for missing an exam by providing official documents from doctors, law enforcement officer, etc.
4. Makeup exams will usually differ from the original exam, and may be essay or oral.
5. Missing an exam, without providing official documents from doctors, law enforcement officer, school Dean, etc. to the instructor, will result in an automatic "0" score for the exam!

Lab Policies and Expectations

1. If you use ISU/ITK laboratories, you are responsible for any and all laboratory policies -- including the security policies that govern your account. Policies do change from time to time; therefore, you should review the ISU/ITK Laboratory Policies at the beginning of each semester. Accounts can be temporarily or permanently suspended for policy violations.
2. In the event that your account is suspended for any laboratory or network policy violation, this course will not extend deadlines or eliminate late penalties for assignments that could not be completed because of the suspension.

Academic Dishonesty ("Cheating") Policies

1. Is it worth the risk to be suspended from school for one or more semesters at this late date in your academic career? Don't Cheat!
2. Any form of cheating on any exam in the course may result in an automatic "F" grade for the course, and the case will be forwarded to the Office of the Dean of Students for appropriate disciplinary action.
3. Any form of cheating on an assignment may result in both a zero score for the assignment, and a one-letter grade penalty in the course. Also, the case will be forwarded to the Office of the Dean of Students for appropriate disciplinary action.
4. Individual assignments are not team-based activities. Therefore, you must not discuss or collaborate with other students. Doing so is considered cheating. If you have any questions or concerns regarding your assignments, please find time to see me.
5. Any form of cheating on a quiz may result in a zero score for that quiz, and the case will be forwarded to the Office of the Dean of Students for appropriate disciplinary action.
6. Cheating, or helping another student to cheat, are considered equal cases of academic dishonesty and will be dealt with as noted above.
7. Giving another student access to your written assignment(s), your computer account, or negligently permitting another student to access your computer account constitutes cheating on your part if that

other student copies any files that become implicated in a cheating case. Protect your work and account as if your academic career depends on it!

8. Cheating is certainly not worth the risk to your academic career. Cheating can create an even greater risk to your professional career as well. If you cheat in the courses that you take in school, you will not learn the subject matter. If you do not learn the subject matter, you will not be equipped to work as an IT professional. If you are not equipped to work in ITK, you risk losing your job once it is discovered that you are deficient in the essential concepts and methodologies necessary to succeed in your chosen career. Hiring managers and IS colleagues will recognize in a relatively short period of time whether or not you have the skills required by the industry. This is something that you should all take very seriously. Cheating is just not worth it!
9. For a complete description of Academic Integrity see the Illinois State Undergraduate Catalog for 2007-2008. For a more detailed description related to School of Information Technology courses see Some ITK Standards and Practices Affecting Students available from the departmental office.

Inclement Weather Policy: If the University is officially open, we will have class. Any student who is unable to attend class because of the weather will not be penalized.

Disclaimer:

1. The schedule and procedures in this course are subject to change in the event of extenuating circumstances.
2. Any student needing to arrange a reasonable accommodation for a documented disability should contact Disability Concerns at 350 Fell Hall, 438-5853 (voice), 438-8620 (TDD).