

THE UNIVERSITY OF TEXAS AT EL PASO
Woody L. Hunt College of Business
Department of Accounting and Information Systems

Dallin Fairbanks
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CIS 3350 – Sys. Anal. & Des. For Bus. Ana.
Course Syllabus, Fall 2024

Class Hours: Monday and Wednesdays 12:00 – 1:20 PM at CoBA 301
Office Hours: Monday and Wednesdays 2:00 – 3:00 PM
Tuesdays and Thursdays 12:30 – 2:45 PM

Course Description

This course develops critical thinking skills to facilitate effective problem solving in today's enterprise business model.

This course introduces students to a systematic approach to defining needs, creating specifications, and designing information systems. Course discussion and hands-on case studies providing practical knowledge and experience.

Waterfall and agile systems analysis and design techniques will be used to develop and document effective computer-based information systems projects. Students will also learn project management standards and create project plans using currently available project management application software.

Learning Objectives

Upon successful completion of this course, students will be able to:

- Analyze and design components of an information management system using various techniques and tools within the traditional Systems Development Life Cycle (SDLC) Waterfall methodology.
- Analyze and design components of a information management system using various techniques and tools within the traditional Systems Development Life Cycle (SDLC) Agile methodology.
- Utilize currently available project management software for tracking and reporting project tasks, costs, resources and timelines for both Waterfall and Agile projects.
- Analyze and discuss systems acquisition, implementation, testing, and on-going maintenance/monitoring issues, risks, and best practices.
- Identify and analyze professionalism and ethics in project SDLCs.
- Identify system risks and issues and mitigation strategies.
- Analyze and discuss governance, security, and privacy.

- Analyze the business environment and how Information Technology supports the organization achieve business objectives.
- Identify and analyze standards and best practices for Information Technology governance and management such as ISACA's COBIT and ISO standards.
- Identify and analyze industry relevant Information Technology career paths, computer certifications and staying current in a rapidly changing career field.

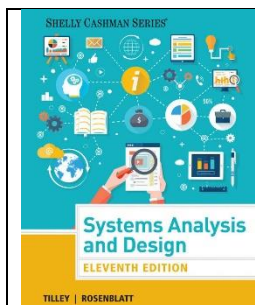
UTEP EDGE – Experiences

 <p>LEARNING COMMUNITIES Build friendships, gain academic support, and connect ideas across linked classes by joining a learning community</p>	 <p>CREATIVE ACTIVITIES Showcase your creative abilities through experiences that highlight your talents</p>	 <p>RESEARCH & SCHOLARLY ACTIVITIES Team-up with faculty to gain experience and make intellectual and creative contributions to your field</p>	 <p>STUDENT LEADERSHIP Develop professional values by assuming leadership roles in your campus experiences</p>
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UTEP EDGE – Advantages

 <p>COMMUNICATION Reach mutual understanding through effective exchange of information, ideas, and feelings</p>	 <p>CONFIDENCE Be self-assured through appreciating your own talents, abilities, skills, and qualities</p>	 <p>CRITICAL THINKING Analyze and evaluate issues in order to solve problems and develop informed opinions</p>	 <p>GLOBAL AWARENESS Understand and appreciate people, cultures, and ideas from around the world that impact our community</p>
 <p>LEADERSHIP Step up, think, and act critically and creatively to bring others together to accomplish a common task</p>	 <p>PROBLEM SOLVING Find solutions to difficult or complex issues</p>	 <p>SOCIAL RESPONSIBILITY Act ethically and responsibly for the benefit of society and the public good</p>	 <p>TEAMWORK Participate as an effective, efficient member of a group in order to meet a common goal</p>

Required books



Tilley, Scott R., and Harry J. Rosenblatt. *Systems Analysis and Design*. 11th ed., Cengage Learning, 2017.

Technology Requirements

Course content is delivered via the Internet through the Blackboard learning management system.

Attendance will be monitored by using student's Blackboard visits

Ensure your UTEP e-mail account is working and that you have access to the Web and a stable web browser. Google Chrome and Mozilla Firefox are the best browsers for Blackboard; other browsers may cause complications. When having technical difficulties, update your browser, clear your cache, or try switching to another browser.

Teaching methods

1. Class Assignments (CASAs)
 - i. It is important for students to come prepared to class and engage in each session. Therefore, before each lecture, students will be assigned a CASA assignment. The goal of these assignments is to test the students' preparation for each lecture. All CASAs are due one hour before the lecture. Only students who attend in person or present a formal justification for their absence will receive credit for CASA submissions.
2. Assignments
 - i. Regular assignments related to the content we cover in class will be assigned and submitted to Blackboard
3. Exams
 - i. This course includes two exams. The exams will consist of multiple-choice questions which may involve the concepts discussed in the textbook, materials covered in assigned projects, and topics covered in class.
 - ii. Exams will be delivered via blackboard
 - iii. A student who is unable to take an exam due to an emergency must inform me of that fact on or earlier than the day of the exam and arrange for a make-up exam before the graded exam is returned to the class. Any student requiring a make-up exam will have to document his/her excuse (e.g., a letter from a physician written on the physician's letterhead). Make-up exams will only be given during a regular class period or during my office hours. In no event will a make-up exam be given after the graded exam is returned to the class, which is usually the class period after the exam is scheduled.
4. Final project
 - i. The final project will be assigned six weeks before the final day of class. This project will be completed in teams. We will discuss specifics in class.

Evaluation

1. Exams..... 30%
2. Final Project..... 30%
3. CASA Assignments/Attendance..... 10%
4. HW..... 30%

A	B	C	D	F
90%	80%	70%	60%	<60%

Late assignments

Late assignments will be awarded 20% less credit per day late. Make-up assignments, class assignments, discussions, checkpoints, and presentations will not be given.

Extra credit

The course incorporates extra credit opportunities in assignments, in-class activities, and discussions to promote students' engagement inside and outside the classroom.

Email Procedure

Please include "CIS 3350" in the subject line of all emails to the instructor to ensure that they are properly filtered. It would be helpful if the subject line also included a brief statement of need, for example: "CIS 3350 – Request for Appointment." Please read the following link about emailing a professor for some helpful suggestions (e.g., please start with a greeting including my name and a signature including your name): <http://www.wikihow.com/Email-a-Professor>.

Accommodations

If you need special accommodations due to a disability, as recognized by the Americans with Disabilities Act, please contact The Center for Accommodations and Support Services (CASS) at 747-5148 or email at cass@utep.edu, or visit their office located at UTEP Union East, Room 106. For additional information, please visit the CASS website at www.sa.utep.edu/cass.

Academic integrity

Academic dishonesty is prohibited and is considered a violation of the UTEP Handbook of Operating Procedures. It includes, but is not limited to, cheating, plagiarism, and collusion. Cheating may involve copying from or providing information to another student, possessing unauthorized materials during a test, or falsifying research data on laboratory reports. Plagiarism occurs when someone intentionally or knowingly represents the words or ideas of another as one's own. Collusion involves collaborating with another person to commit any academically dishonest act. Any act of academic dishonesty attempted by a UTEP student is unacceptable and will not be tolerated. All suspected violations of academic integrity at The University of Texas at El Paso must be reported to the Office of Student Conduct and Conflict Resolution (OSCCR) for possible disciplinary action. To learn more, please visit [HOOP: Student Conduct and Discipline](#).

Acceptable use of Artificial Intelligence (AI)

Some AI technologies or automated tools, particularly generative AI such as ChatGPT or DALL-E, can be beneficial during the early brainstorming stages of an activity, and you are welcome to

explore them for that purpose. However, keep in mind that AI-generated ideas are not your own and may hinder your ability to think critically and creatively about a problem. It is also important to remember that these technologies often “hallucinate” or produce materials and information that are inaccurate or incomplete—even providing false citations for use.

That said, you are not allowed to submit any AI-generated work in this course as your own. If you use any information or materials created by AI technology, you are required to cite it like you would any other source. See the example citation below:

Chat-GPT(version). Date of query (year/month/day). “Text of your query.” Generated using OpenAI Chat-GPT. <https://chat.openai.com/>

Direct use of AI generated materials submitted as your own work will be treated as plagiarism and reported to the Office of Student Conduct and Conflict Resolution (OSCCR).

Tentative Course Outline

Week 1	
01/22 - Session 0	Syllabus, Why Analysis and Design?
Week 2	
01/27 - Session 1	Introduction to Systems Analysis and Design
01/29 - Session 2	Systems Development Life Cycle
Week 3	
02/03 - Session 3	Analyzing the Business Case - Part 1
02/05 - Session 4	Analyzing the Business Case - Part 2
Week 4	
02/10 - Session 5	Project Management
02/12 - Session 6	Analysis & Requirements Modeling: Introduction
Week 5	
02/17 - Session 7	Interviews
02/19 - Session 8	Exam 1 Review
Exam 1	
Week 6	
02/24 - Session 9	Data and Process Modeling
02/26 - Session 10	Diagramming: Dataflow Diagrams
Week 7	
03/03 - Session 11	Object Modeling
03/05 - Session 12	Diagramming: Activity Diagrams
Spring Break	
03/10 - No Session	Spring Break
03/12 - No Session	Spring Break
Week 8	
03/17 - Session 13	Diagramming: Use Case Diagrams

03/19 - Session 14	Diagramming: Class Diagrams
Week 9	
03/24 - Session 15	Diagramming: Sequence Diagrams
03/26 - Session 16	Development Strategies - Part 1
Week 10	
03/31 - Session 17	Development Strategies - Part 2
04/02 - Session 18	User Interface Design
Week 11	
04/07 - Session 19	UI Practice: Figma - Part 1
04/09 - Session 20	Data Design & ERD
Week 12	
04/14 - Session 21	System Architecture
04/16 - Session 22	Exam 2 Review
Exam 2	
Week 13	
04/21 - Session 23	Systems Implementation - Part 1
04/23 - Session 24	Systems Implementation - Part 2
Week 14	
04/28 - Session 25	Systems Support & Security - Part 1
04/30 - Session 26	Systems Support & Security - Part 2
Week 15	
05/05 - Session 27	Final Project Presentations - Day 1
05/07 - Session 28	Final Project Presentations - Day 2

Important Notes:

1. In addition to the announced office hours, students may email me at any time to ask questions.
2. If you have any trouble with the class, please get help ASAP. Do not let the problems build up.
3. This syllabus is tentative.