

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

Dallin Fairbanks
Office Room: CoBA 234
Email: djfairbanks@utep.edu

CIS 3350 – Sys. Anal. & Des. For Bus. Ana.
Course Syllabus, Spring 2026

Office Hours: Mondays 3:00 – 5:00pm
Wednesdays 3:00 – 5:00pm
Friday 1:30 – 4:00pm

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.

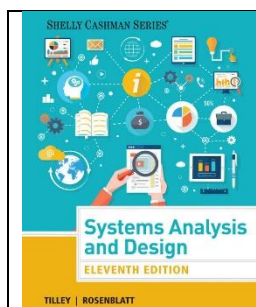
UTEP EDGE – Experiences



UTEP EDGE – Advantages



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.

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 Prep assignments
 - 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 Class Prep assignment. The goal of these assignments is to expose students to course material to prepare them for each lecture. Class Prep assignments are due one hour before the lecture.
2. Attendance
 - i. Students will be graded on their attendance. If a student is present on time at the beginning of class, they will receive full credit for the class. If a student shows up later than 5 minutes after the start of class, they will be marked as tardy and will receive a 50% deduction on their attendance grade.
 - ii. At the end of the semester, each students' 5 lowest attendance grades will be dropped from their final score.
3. Assignments
 - i. Regular assignments related to the content we cover in class will be assigned and submitted to Blackboard
4. 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.
5. Final project
 - i. The final project will be assigned towards the beginning of the semester. This project will be completed in teams. We will discuss specifics in class.

Evaluation

1. Exams – 100 points each.....200 points
2. Final Project – 200 points200 points
3. Reading Quizzes – 10 points each (20 total)200 points
4. Attendance200 points
5. HW – 20 points each (10 total).....200 points

A	B	C	D	F
900	800	700	600	<600

Late assignments

Late assignments will be awarded 25% less credit per day late. If students need additional time to complete an assignment, they may contact me **before the assignment is due** to receive a deadline extension. Make-up assignments will not be given.

Extra credit

In this class you may earn up to a limit of 20 extra credit points (equivalent to a 2% boost to your final grade) by completing extra credit opportunities offered throughout the semester. Extra credit opportunities include but are not limited to the following:

- One extra credit point will be granted to each student for every typo or mistake they catch in the course material (e.g., syllabus, PowerPoints, quizzes, etc.)
- 10 extra credit points will be granted to each student who completes course evaluations at the end of the semester

Email Procedure

Please include “CIS 3350” and your course CRN 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 CRN 10528 – 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 ones' 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 as your own in this course.** 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

Date	Lessons/Assignments	Project Milestones
Week 1		
1/21	Syllabus, Intro to Analysis and Design	
1/23	Effective Learning & AI	
Week 2		
1/26	Introduction to Analysis and Design	
1/28	Introduction to Analysis and Design/SDLC	
1/30	Final Project Overview	
Week 3		
2/2	Analyzing the Business Case - Part 1	
2/4	Analyzing the Business Case - Part 2	
2/6	Analyzing the Business Case - Part 3	
Week 4		
2/9	Milestone 1 In-class Work Session	
2/11	Project Management	
2/13	Project Management/Analysis	Milestone 1
Week 5		
2/16	Analysis & Requirements Modeling: Introduction	
2/18	Interviews	
2/20	Exam 1 Review	
Week 6		

2/23	Diagramming: Activity Diagrams - Part 1	
2/25	Diagramming: Activity Diagrams - Part 2	
2/27	Diagramming: Activity Diagrams - Part 3	
Week 7		
3/2	Diagramming: Dataflow Diagrams - Part 1	
3/4	Diagramming: Dataflow Diagrams - Part 2	
3/6	Diagramming: Dataflow Diagrams - Part 3	
Week 8		
3/9	Milestone 2 In-class Work Session	
3/11	Diagramming: Use Case Diagrams	
3/13	Diagramming: Use Cases	Milestone 2
Spring Break		
3/16	No Class - Spring Break	
3/18	No Class - Spring Break	
3/20	No Class - Spring Break	
Week 9		
3/23	Diagramming: Class Diagrams - Part 1	
3/25	Diagramming: Class Diagrams - Part 2	
3/27	No Class - Cesar Chavez Holiday	
Week 10		
3/30	Diagramming: Sequence Diagrams	
4/1	Development Strategies - Part 1	
4/3	Development Strategies - Part 2	
Week 11		
4/6	Data Design & ERD - Part 1	
4/8	Data Design & ERD - Part 2	
4/10	User Interface Design	
Week 12		
4/13	Milestone 3: In-class Work Session	
4/15	Figma - Part 1	
4/17	Figma - Part 2	Milestone 3
Week 13		
4/20	Figma - Homework	
4/22	System Architecture	
4/24	Exam 2 Review	
Week 14		
4/27	Implementation	
4/29	Support	
5/1	Artificial Intelligence in the SDLC	
5/3		Final Presentation Slides Due
Week 15		
5/4	Final Project Presentations - Day 1	
5/6	Final Project Presentations - Day 2	
5/8		Final Report Due

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.