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Syllabus CSCI 440. 61E – Applied Software Project Development East Texas A&M University Spring 2025

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Office Hours:

Day	Time
W	1:30 pm - 3:00 pm
R	1:30 pm – 2:30 pm

Communication Response Time: 24 hours

(Please send a second email if you did not receive a response after 2 days)

Preferred Form of Communication: face-to-face

There are many ways to reach me. There is no substitute for face-to-face communication which often leads to more refined and focused questions resulting in your improved understanding. I strongly encourage you to take advantage of my office hours. Questions during class or immediately after class are always welcomed. Email is an easy way to ask questions outside of class but is not productive as face-to-face communication.

Meeting Time and Place

Monday, Wednesday: 12:00 pm - 1:15 pm, ACB1 #314

Recommended Textbook

Systems Analysis and Design in a Changing World - 7th Edition by John W. Satzinger, Robert B. Jackson, and D. Burd, Shelly, Cengage Learning, 2016, ISBN: 9781305117204. (or earlier edition)

Prerequisite

CSCI 359 (Min Grade C) and CSCI 380 (Min Grade C)

Course Description

The main goal of this capstone course is to integrate the knowledge that students acquired from across the Computer Science curriculum into the analysis, design and implementation of a semester project. In this course, we review the topics on traditional, object oriented and agile methodologies to software development. The emphasis is on the application of modern engineering approaches to software construction and on team collaboration. Students through their work on the project will identify a particular problem, develop a proposal

Course Outcomes

Upon completion of the course, students will be able to:

- o Explain well known software development process models.
- Use modeling techniques (such as UML diagrams) to specify the requirements and design of software system.
- o Build user-friendly, aesthetic, and functional interfaces for software projects.
- The ability to analyze a problem, identify, formulate and use appropriate computing techniques to formulate and implement a solution.
- Understand and apply software testing techniques to evaluate a computer-based system. Communicate effectively with a range of audiences.
- o Function effectively on a team to accomplish an independent project under time and design constraints.

Project Information:

A significant component of the course consists of conducting a semester group project with the following requirements:

- Group Formation:
 - Create teams of 3-4 members.
 - Appoint a team leader to facilitate communication and coordination.
- Project Idea Selection:
 - Brainstorm ideas that align with individual interests and skills.
 - Assess feasibility based on timeframe and available resources.
 - Clearly define project objectives, scope, and potential impact.
- Project Analysis and Design:
 - Utilize methodologies taught in CSIS359 for a comprehensive analysis and design.
 - Identify and document functional and non-functional requirements.
 - Develop a high-level architecture diagram and detail system components.
 - Create an implementation plan outlining steps and timeline.
- Development:
 Teams
 - Teams must build a fully functional project version, adhering to all specified requirements.
- Testing:
 - Conduct comprehensive testing to verify that the implementation aligns with project specifications and desired functionality.
- Weekly Reporting:
 - Each team is required to submit a weekly report detailing their activities for the previous week.
 - Report Content:
 - Completed Tasks: List all tasks successfully finished during the week, including key milestones achieved.
 - Individual Contributions: Clearly outline each team member's significant contributions and responsibilities undertaken.

Upcoming Tasks: Provide a detailed plan of tasks scheduled for the following week, ٠ highlighting priorities and dependencies.

East Texas A&M University acknowledges that there are legitimate uses of Artificial Intelligence, chatbots, or other software that has the capacity to generate code, and textual answers. Any unreferenced and undocumented use of such software is not allowed and constitutes an instance of academic dishonesty (plagiarism).

Grading

-	Project Deliverables:	50% of grade
-	Midterm Presentation:	20% of grade
_	Final Group Presentation:	30% of grade

Letter grades will be determined using a standard percentage of points scale:

Letter Grade	Cut-off Score
А	90%
В	80%
С	70%
D	60%
F	Below 60%

Class attendance, doing all your project work will help the borderline cases. Check your grades often. Any score may be disputed up to seven (7) days after the score is posted. After 7 days, the score remains as-is.

Technology Requirements - LMS

All course sections offered by East Texas A&M University have a corresponding course shell in the myLeo Online Learning Management System (LMS). Below are technical requirements LMS Requirements:

https://community.brightspace.com/s/article/Brightspace-Platform-Requirements

LMS Browser Support: https://documentation.brightspace.com/EN/brightspace/requirements/all/browser_support.htm

YouSeeU Virtual Classroom Requirements: https://support.vouseeu.com/hc/en-us/articles/115007031107-Basic-System-Requirements

Access and Navigation

You will need your campus-wide ID (CWID) and password to log into the course. If you do not know your CWID or have forgotten your password, contact the Center for IT Excellence (CITE) at 903.468.6000 or helpdesk@tamuc.edu.

Communication and Support

TAMUC campus open computer lab, etc.

If you have any questions or are having difficulties with the course material, please contact your Instructor.

Technical Support

If you are having technical difficulty with any part of Brightspace, please contact Brightspace Technical Support at 1-877-325-7778. Other support options can be found here: https://community.brightspace.com/support/s/contactsupport

Minimal Technical Skills Needed

Proficiency in programming, system analysis & design, web development, IDE, learning management system and word processing.

Methods of Instruction

The course will consist mainly of discussions, student presentations and lectures. Important material from the text and outside sources will be covered in class. Therefore, class attendance is essential for success. Students are expected to contribute to each class in the form of discussions, questions and project updates.

This syllabus contains an overview of what will be covered in class; for specific information, students are referred to the class web page maintained on D2L course management system. The course web page will contain lectures, project information and supporting material. Information on D2L will be updated frequently so it is a good idea to check it regularly. Assignments are posted on D2L and should be submitted through D2L.

Attendance

You are expected to attend every class. If you must miss a class, it is your responsibility to make up for the work that you missed. If you are going to be absent from class, please notify the instructor in advance. **Tips for Success in the Course**

- 1. Check D2L at least twice a week.
- 2. Communicate effectively and constantly with your team members. 3. Start your project assignments (sprints) early.

Late Submissions Policy

All work submitted electronically must be submitted by midnight of the due date. Late work will be deducted 10% for each day past the due date. Assignment will not be accepted after three days from the due date.

Make-up Policy

No individual make-up test will be permitted except in the case of a formal institutional excuse. There will be no makeup for project deliverables.

Syllabus Change Policy

The syllabus is a guide. Circumstances and events, such as student progress, may make it necessary for the instructor to modify the syllabus during the semester. Any changes made to the syllabus will be announced in advance.

Tentative Course Outline

Week	Content
1	Introduction & Review
2	Scrum & Jira
3-4	Project launch, Sprint 1
5-6	Sprint 2
7-8	Sprint 3
9	Midterm Presentation
10	Spring Break
11-12	Sprint 4
13-14	Sprint 5
15-16	Sprint 6
17	Final Presentation

Student Conduct

All students enrolled at the University shall follow the tenets of common decency and acceptable behavior conducive to a positive learning environment. The Code of Student Conduct is described in detail in the Student Guidebook.

http://www.tamuc.edu/Admissions/oneStopShop/undergraduateAdmissions/studentGuidebook.aspx

Students should also consult the Rules of Netiquette for more information regarding how to interact with students in an online forum: <u>https://www.britannica.com/topic/netiquette</u>

Academic Honesty

"All students enrolled at the University shall follow the tenets of common decency and acceptable behavior conducive to a positive learning environment." (See Student's Guide Handbook, Policies and Procedures, Conduct). It is the policy of the University, that no form of plagiarism or cheating will be tolerated. Plagiarism is defined as the deliberate use of another's work and claiming it as one's own. This means ideas as well as text or code, whether paraphrased or presented verbatim (word-for-word). Cheating is defined as obtaining unauthorized assistance on any assignment. Proper citation of sources must always be utilized thoroughly and accurately. If you are caught sharing or using other people's work in this class, you will receive a 0 grade and a warning on the first instance. A subsequent instance will result in receiving an F grade for the course, and possible disciplinary proceedings. If you are unclear about what constitutes academic dishonesty, ask.

For more details and the definition of academic dishonesty see the following procedures:

Undergraduate Academic Dishonesty 13.99.99.R0.03

http://www.tamuc.edu/aboutUs/policiesProceduresStandardsStatements/rulesProcedures/13students/undergraduates/13.99.99.R0.03UndergraduateAcademicDishonesty.pdf

Special Needs

The Americans with Disabilities Act (ADA) is a federal anti-discrimination statute that provides comprehensive civil rights protection for persons with disabilities. Among other things, this legislation requires that all students with disabilities be guaranteed a learning environment that provides for reasonable accommodation of their disabilities. If you have a disability requiring an accommodation, please contact:

Office of Student Disability Resources and Services

East Texas A&M University Gee Library- Room 162 Phone (903) 886-5150 or (903) 886-5835 Fax (903) 468-8148 Email: <u>studentdisabilityservices@tamuc.edu</u> Website: Office of Student Disability Resources and Services http://www.tamuc.edu/campusLife/campusServices/studentDisabilityResourcesAndServices/

East Texas A&M Supports Students' Mental Health

The Counseling Center at East Texas A&M, located in the Halladay Building, Room 203, offers counseling services, educational programming, and connection to community resources for students. Students have 24/7 access to the Counseling Center's crisis assessment services by calling 903-886-5145. For more information regarding Counseling Center events and confidential services, please visit <u>www.tamuc.edu/counsel</u>

Nondiscrimination Notice

East Texas A&M University will comply in the classroom, and in online courses, with all federal and state laws prohibiting discrimination and related retaliation on the basis of race, color, religion, sex, national origin, disability, age, genetic information or veteran status. Further, an environment free from discrimination on the basis of sexual orientation, gender identity, or gender expression will be maintained.

Campus Concealed Carry Statement

Texas Senate Bill - 11 (Government Code 411.2031, et al.) authorizes the carrying of a concealed handgun in East Texas A&M University buildings only by persons who have been issued and are in possession of a Texas License to Carry a Handgun. Qualified law enforcement officers or those who are otherwise authorized to carry a concealed handgun in the State of Texas are also permitted to do so. Pursuant to Penal Code (PC) 46.035 and East Texas A&M Rule 34.06.02.R1, license holders may not carry a concealed handgun in restricted locations.

For a list of locations, please refer to the Carrying Concealed Handguns On Campus document and/or consult your event organizer.

Web url:

http://www.tamuc.edu/aboutUs/policiesProceduresStandardsStatements/rulesProcedures/34SafetyOfEmpl oyees AndStudents/34.06.02.R1.pdf

Pursuant to PC 46.035, the open carrying of handguns is prohibited on all East Texas A&M campuses. Report violations to the University Police Department at 903-886-5868 or 9-1-1.