



CSCI440.01W
Applied Software Project Development
WEB-BASED
COURSE SYLLABUS: SPRING 2026

INSTRUCTOR INFORMATION

Instructor: (Name & Title) Dr. Abdullah N. Arslan

Office Location: JOUR 206

Office Hours: Web-based

University Email Address: Abdullah.Arslan@etamu.edu

Preferred Form of Communication: e-mail

Communication Response Time: 24 hrs

COURSE INFORMATION

Materials – Textbooks, Readings, Supplementary Readings

Textbook(s) Required

Systems Analysis and Design in a Changing World (7th Edition), 2016, John W. Satzinger, Robert B. Jackson, Stephen D. Burd, ISBN: 978-1-305-11720-4

The professor will make supplementary information for the course available online. These include the course syllabus, class notes, assignments, PowerPoint slides, class announcements, test dates, etc. The professor will announce when such information becomes available electronically. It is the student's responsibility to follow these announcements.

Software Required

Microsoft Vision or other common tools for creating project documents

Optional Texts and/or Materials

1. *Applying UML and Patterns: an Object-Oriented Analysis and Design and Iterative Development*, 2004, Craig Larman, Addison Wesley Professional, ISBN: 0-13-148906-2 <https://aanimesh.files.wordpress.com/2013/09/applying-uml-and-patterns-3rd.pdf>
2. *Managing and Leading Software Projects*, 2011, John Wiley & Sons, Richard E. Fairley (Available online)
3. *Guide to the Software Engineering Body of Knowledge (SWEBOKv3)* <http://www.computer.org/web/swebok/v3>
4. *Multidisciplinary Systems Engineering: Architecting the Design Process*, 2015, James A. Crowder, John N. Carbone, Russell P. Demijohn, (New ETAMU Advisory Board book from Raytheon available on course website)

Course Description

Hours: 3

A capstone project to provide the student with experience with analysis, design and implementation of a semester project as a member of a systems development team. Prerequisite: CSCI 359, 380; BUSA 428 or permission of instructor.

In this course, we review briefly the topics on the traditional and object oriented approaches to software development covered in prerequisite courses. The students will put their knowledge on these topics at work on the projects they select at the beginning of the semester.

The main objective is to teach students basics of the software engineering (SE) process life cycle, and develop a project with which the acquired knowledge is put into practice. The project is a major component of this course. Ideally, students complete projects that they started in CSCI 359. If this is not possible, they join such projects whose planning and analysis work were already completed (but could be revised).

Student Learning Outcomes

1. Develop and maintain an informational and project repository web site for an application project.
2. Use Microsoft Visio to create, edit, and publish to a web site traditional process model diagrams.
3. Use Microsoft Visio to create, edit, and publish to a web site Entity-Relationship diagrams.
4. Develop and use a team constitution.
5. Solve team conflicts in a project building environment.
6. Build user-friendly, aesthetic, and functional interfaces for application software projects.
7. Create a database using an Entity-Relationship diagram.

8. Develop and implement a system application project in an object-oriented programming language using traditional process model diagrams as a guide.
9. Connect a database and interface to software project.
10. Create system documentation including help files, diagrams, and programming code.
11. Present the final project to an audience consisting of faculty, peers, administrators, and business leaders.
12. Evaluate other team members based upon specific criteria. (Derived based on team member evaluations.)

COURSE REQUIREMENTS

Minimal Technical Skills Needed

Students must know how to use the learning management system, Microsoft Word and PowerPoint, presentation and graphics programs.

Instructional Methods

The instructor will lecture on software development topics. The parts of the lectures will be devoted to reviewing material on these topics. In parts of the lectures, students will report the status of their work. Students will use some of the lecture time working on their projects. The instructor will join students in these activities.

Student Responsibilities or Tips for Success in the Course

Students must regularly log into the course website for announcements. Students need to on their report their every week and participate in team's work.

GRADING

Final grades in this course will be based on the following scale:

- A = 90%-100%
- B = 80%-89%
- C = 70%-79%
- D = 60%-69%
- F = 59% or Below

Final score will be out of 100, and the above percentages will be applied to student's total score to determine the letter grade.

Assessments

Midterm Team Project Report/Presentation	20%
Midterm Individual Report/Presentation (also considered as Midterm Exam)	20%
Final Team Project Report/Presentation	30%
Final Individual Project Report/Presentation (also considered as Final Exam)	30%

The assessment of work will be largely based on the students' team project and individual contributions to their projects.

Each team reports project progress and work every week.

Each team member explains weekly work and contributions.

In addition, midway into the semester (after the design phase is completed), each team submits a project report. Each individual submits a report on individual contributions to the project. Team assignments can be submitted by one team member for the entire team. Please follow the rules described in assignments, as outlined in the Grading Rubric document. At the end of the semester, the final reports are submitted by each team, and by each team members. All assignments must be completed and turned in on time.

All individual assignments must be completely the original work of the student submitting them. Team assignments can be submitted by one team member for the entire team. The students' completed work must be placed in the appropriate submission folder of D2L. **DO NOT EMAIL THE PROFESSOR ASSIGNMENTS OUTSIDE D2L.** Please follow the rules for naming and posting assignments, as outlined in the Grading Rubric document. All assignments must be completed on time.

TECHNOLOGY REQUIREMENTS

LMS

All course sections offered by Texas A&M University-Commerce 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.youseeu.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@ETAMU.edu.

Note: Personal computer and internet connection problems do not excuse the requirement to complete all course work in a timely and satisfactory manner. Each student needs to have a backup method to deal with these inevitable problems. These methods might include the availability of a backup PC at home or work, the temporary use of a computer at a friend's home, the local library, office service companies, Starbucks, a ETAMU campus open computer lab, etc.

COMMUNICATION AND SUPPORT

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>

Interaction with Instructor Statement

The instructor will respond to your questions within 24 hrs unless there are exception situations such as sickness.

COURSE AND UNIVERSITY PROCEDURES/POLICIES

Course Specific Procedures/Policies

For all Quizzes and Tests please follow the instructions posted along with them.

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.

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.ETAMU.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:

<https://www.britannica.com/topic/netiquette>

ETAMU Attendance

For more information about the attendance policy please visit the [Attendance](#) webpage and [Procedure 13.99.99.R0.01](#).

<http://www.ETAMU.edu/admissions/registrar/generalInformation/attendance.aspx>

<http://www.ETAMU.edu/aboutUs/policiesProceduresStandardsStatements/rulesProcedures/13students/academic/13.99.99.R0.01.pdf>

Academic Integrity

Students at Texas A&M University-Commerce are expected to maintain high standards of integrity and honesty in all of their scholastic work. For more details and the definition of academic dishonesty see the following procedures:

[Undergraduate Academic Dishonesty 13.99.99.R0.03](#)

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

[Graduate Student Academic Dishonesty 13.99.99.R0.10](#)

<http://www.ETAMU.edu/aboutUs/policiesProceduresStandardsStatements/rulesProcedures/13students/graduate/13.99.99.R0.10GraduateStudentAcademicDishonesty.pdf>

Students with Disabilities-- ADA Statement

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

Texas A&M University-Commerce

Gee Library- Room 162

Phone (903) 886-5150 or (903) 886-5835

Fax (903) 468-8148

Email: studentdisabilityservices@ETAMU.edu

Website: [Office of Student Disability Resources and Services](#)

<http://www.ETAMU.edu/campusLife/campusServices/studentDisabilityResourcesAndServices/>

Nondiscrimination Notice

Texas A&M University-Commerce 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 Texas A&M University-Commerce 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 A&M-Commerce 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.ETAMU.edu/aboutUs/policiesProceduresStandardsStatements/rulesProcedures/34SafetyOfEmployeesAndStudents/34.06.02.R1.pdf>

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

Texas A&M University-Commerce acknowledges that there are legitimate uses of Artificial Intelligence, ChatBots, or other software that has the capacity to generate text, or suggest replacements for text beyond individual words, as determined by the instructor of the course.

Any use of such software must be documented. Any undocumented use of such software constitutes an instance of academic dishonesty (plagiarism).

Individual instructors may disallow entirely the use of such software for individual assignments or for the entire course. Students should be aware of such requirements and follow their instructors' guidelines. If no instructions are provided the student should assume that the use of such software is disallowed.

In any case, students are fully responsible for the content of any assignment they submit, regardless of whether they used an AI, in any way. This specifically includes cases in which the AI plagiarized another text or misrepresented sources.

13.99.99.R0.03 Undergraduate Academic Dishonesty

<https://inside.ETAMU.edu/aboutus/policiesproceduresstandardsstatements/rulesprocedures/13students/undergraduates/13.99.99.R0.03UndergraduateAcademicDishonesty.pdf>

13.99.99.R0.10 Graduate Student Academic Dishonesty

<https://inside.ETAMU.edu/aboutus/policiesproceduresstandardsstatements/rulesprocedures/13students/graduate/13.99.99.R0.10.pdf>

COURSE OUTLINE / CALENDAR

TOPICS/ACTIVITIES BY WEEKS

PROJECT REPORTS ARE REQUIRED EVERY WEEK

WEEK	TOPIC
1-3	Reiteration of Project Phases from CSCI 359 projects, and Project Design
4	Project Design Review
5	Midterm Team and Individual Project Reports/Presentations are due.
6-13	Project Implementation and Testing.
14	Final Project Team and Individual Project Reports/Presentations are due.

The syllabus/schedule are subject to change.