



**CSCI440.01W**  
**Applied Software Project Development**  
**WEB-BASED**  
COURSE SYLLABUS: FALL 2021

## **INSTRUCTOR INFORMATION**

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

**University Email Address:** [Abdullah.Arslan@tamuc.edu](mailto:Abdullah.Arslan@tamuc.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 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 TAMUC 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 had already been 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<br>(also considered as Midterm Exam)     | 20% |
| Final Team Project Report/Presentation  | 30% |
| Final Individual Project Report/Presentation<br>(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.

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](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@tamuc.edu](mailto:helpdesk@tamuc.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 TAMUC 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**

**A&M-Commerce requires the use of face-coverings in all instructional and research classrooms/laboratories. Exceptions may be made by faculty where warranted. Faculty have management over their classrooms. Students not using face-coverings can be required to leave class. Repetitive refusal to comply can be reported to the Office of Students' Rights and Responsibilities as a violation of the student Code of Conduct.**

**Students should not attend class when ill or after exposure to anyone with a communicable illness. Communicate such instances directly with your instructor. Faculty will work to support the student getting access to missed content or completing missed assignments.**

### ***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.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:

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

### **TAMUC Attendance**

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

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

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

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

<http://www.tamuc.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@tamuc.edu](mailto:studentdisabilityservices@tamuc.edu)

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

<http://www.tamuc.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.tamuc.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.

## **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.*