



# CSCI 440 – Applied Software Project Development

COURSE SYLLABUS: Spring 2023

## INSTRUCTOR INFORMATION

<b>Instructor</b>	Prof. Eman Hammad
<b>Office Location</b>	RELLIS ACB2-208
<b>Office Hours</b>	TBD, or by appointment
<b>Email</b>	eman.hammad at tamuc dot edu (1-2 business days) Email subject <b>MUST contain CSCI440 – Spring2023</b>
<b>Communication Response Time</b>	Within 24 hours on weekdays, but any communication after Friday 5pm will be responded to by the following Monday

## COURSE INFORMATION

### Lectures (time/location):

- Monday/Wednesday 10:35 – 11:50 AM.
- Synchronously: in-person (room TBD).

### Textbook(s) **Recommended:**

- Systems Analysis and Design in a Changing World (6 th or Higher Edition), 2011, John W. Satzinger, Robert B. Jackson, Stephen D. Burd, ISBN: 978-1111534158.

### Course Description

The main goal of this capstone course is to integrate the knowledge that students acquired from across the 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 outlining a computational solution to the problem, implement the proposed solution, then test and evaluate the results. The project is a major component of this course and teams will report on their progress by having presentations and by submitting project deliverables.

### Student Learning Outcomes

Upon completing this course, students should be able to:

*The syllabus/schedule are subject to change.*

- Explain well known software development process models.
- Use modeling techniques (such as UML diagrams) to specify the requirements and design of software systems.
- 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.
- Function effectively on a team to accomplish an independent project under time and design constraints.

## **COURSE REQUIREMENTS**

### **Minimal Technical Skills Needed**

#### PREREQUISITES:

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

### **Instructional Methods**

This course is largely built around the project component; hence the following will be utilized as relevant:

- Meetings during lecture times to share progress updates, risks and issues, review milestone deliverables and present at designated dates as listed in the course schedule.

### **Student Responsibilities or Tips for Success in the Course**

1. It is expected that you are the owner of your success in this course, including ensuring you understand the expectations, timelines, policies and learning objectives.
2. Baseline expectations:
  - a. Check LMS frequently.
  - b. Follow the material in the textbook, and use slides as your guideline.
  - c. Start your homework assignments early.
  - d. Check the feedback on homework assignments.
  - e. Do your work independently: collaboration and participation in study groups is encouraged to improve your understanding and to develop problem-solving strategies. However, cheating and plagiarism will not be tolerated, i.e. do not copy other people's work.
  - f. Communicate with the instructor when you are confused, or having difficulties with the course material / assignment / project.

## **Course Project and GRADING**

A significant component of the course consists of selecting a semester group project. Each student is expected to work in groups of three or four. Consider appointing a group leader to coordinate the effort. Every week all teams are required to meet with me and have a weekly report that includes presence/absence/late appearance and each team member's major activities and contribution

Letter grades will be determined using a standard percentage of points scale: **A = 90%-100%, B = 80%-89%, C = 70%-79%, D = 60%-69%, F = 59% or Below.**

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.

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## Assessments

Assessment Type	Weight of Final Grade
Project Deliverables	50%
Individual Midterm Presentation	15%
Individual Final Presentation	15%
Final Project Presentation/Demonstration	20%

## COURSE OUTLINE / CALENDAR

Week	Course Subject
Week 1	Introduction & Review, Project Re-Launch & Sprint Planning
Week 2, 3	Sprint 1
Week 4, 5	Sprint 2
Week 6, 7	Sprint 3
Week 8	<b>Midterm Presentations</b> , Sprint 4
<b>Week 9</b>	<b>Spring Break</b>
Week 10	Sprint 4
Week 11, 12	Sprint 5
Week 13, 14	Sprint 6
Week 15	<b>Final Individual Presentation</b>
Week 16	<b>Final Group Presentation / Demonstration</b>

\*The schedule is **tentative** and may be adjusted to fit the actual class progress.

## 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

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course work in a timely and satisfactory manner. Each student is expected to have a backup method to deal with these inevitable problems. In case of extreme technology related circumstances, please communicate directly with the instructor to best manage your success in this course.

## COMMUNICATION AND SUPPORT

### 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

To communicate with me about this course, kindly use the email address included in this syllabus. During the week, you can generally expect a response to your emails within 1-2 business days. *If you do not receive my response in 2 business days, please send a second email to me.*

To ensure I get your email and respond within indicated timelines above, please make sure that:

- Your email message is sent from your Texas A&M student account.
- Your email message includes a descriptive subject with the indicated prefix:  
CSCI 440 – Spring 2022 -- <descriptive subject>

## COURSE AND UNIVERSITY PROCEDURES/POLICIES

### Course Specific Procedures/Policies

Attendance is required. Students are expected to do the readings, attend class, and participate in class discussions. Each student is responsible for managing their own time and work-load. Emergency / extreme circumstances causing a student to miss deadlines/exams will need to be supported by official and university approved documentation.

### Positive Learning Environment

Your commitment as a student to learning is evidenced by your enrollment at Texas A & M University-Commerce. "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 Procedure, Conduct).

### Sharing Your Work

All work produced by students may be shared by the instructor with the class for purposes of example and training. Such work will be as anonymous as possible. Finally, the instructor may share your work anonymously with future classes or in her own writing and research.

### Submitting Assignments:

Unless special instructions are provided, assignments are NOT to be posted on any discussion board. Your completed work MUST be placed in the appropriate Dropbox in D2L Online. DO NOT EMAIL ME ANY ASSIGNMENTS AS THEY WILL BE DELETED. Please follow the rules for naming and posting assignments.

## Late Work Policy

All assignments are due at the date and time specified.

**Please keep in mind that NO late work will be accepted without penalty.** If an assignment is turned in after the due date, **20% of the grade will be forfeited.** **An assignment must be submitted within 24 hours of the due date if you want it graded.**

- You have ONE 24-hour "late day" token that can be used on any of the assignments
- After you've used your token, assignments will still be accepted up to 24 hours late, but with a 20% penalty (automatically deducted).
- Assignments turned in more than 24 hours late will NOT be reviewed and will not be graded.

Additional extensions on assignments, will be granted with appropriate documentation. If you have a problem submitting an assignment on time, you should contact me **BEFORE** the due date.

## Makeup Policy

**There will be NO makeup presentation/deliverables.** If you shall miss a deliverable/presentation because of acceptable extreme circumstances (hospitalization, serious injury/sickness, death in the family etc.), you may be offered to choose to receive a grade based on your in-class ranking in the next deliverable.

## Collaboration Policy

Students are encouraged to consult with each other, with the instructor, or anyone else about any assignments / project. However, this must be limited to the discussion of the problem and sketching general approaches to a solution. Each student is responsible for submitting their own independent solutions to the assignment / project. **Consulting another student's or group's solution is prohibited**, and submitted solutions may not be copied from any source. These and any other form of unacceptable collaboration on assignments constitute **cheating**. If you have any question or doubts about whether some activity would constitute cheating, please feel free to ask.

## Academic Integrity

**Instances of academic dishonesty will not be tolerated.** Cheating on exams or plagiarism (presenting the work of another as your own, or the use of another person's ideas without giving proper credit) will result in a failing grade and sanctions by the University. **For this class, all assignments / quizzes / exams / project are to be completed by the individual student unless otherwise specified.**

Any student cheating will receive a zero on the work they are doing, and subsequent cheating will result in a failing grade and potential academic sanctions.

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>

## Basic Tenets of Common Decency

“All students enrolled at the University shall follow the tenets of common decency and acceptable behavior conducive to a positive learning environment.” (Student’s Guide Handbook, Policies and Procedures, Conduct.) This means that rude and/or disruptive behavior will not be tolerated.

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## **Disclaimer**

This syllabus is meant to provide general guidance of what to expect from this course. The instructor reserves the right to make changes as appropriate based on the progress of the class. All changes made to this syllabus during the semester will be announced. This document has been posted electronically. If you print a copy of it, please be sure to consult the last modified date of the online version to verify that your printed copy is current.

## **University Specific Procedures**

### **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>

### **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.