

## Online/Asynchronous CSE 3354 Object-Oriented Software Engineering

### Course Information

Course Number/Section 3354.0W2  
Course Title CSE 3354 – Object Oriented Software Engineering  
Term Spring 2021

### Professor Contact Information

Professor Dr. Mehra Borazjany  
Email Address [mehra@utdallas.edu](mailto:mehra@utdallas.edu) (Please Note, the subject of your email must always contain “3354.0W2”, otherwise, your email will be ignored.)  
Office Location Live meeting using BlackBoard Collaborate or MS Teams

**Note: Office hours will be held live and by appointment only.**

### Course Modality and Expectations

<b>Instructional Mode</b>	online/asynchronous <a href="https://covid.utdallas.edu/students-families-info/spring-2021-registration/">https://covid.utdallas.edu/students-families-info/spring-2021-registration/</a>
<b>Course Platform</b>	This course will be fully online/asynchronous. Link to all the materials (Calendar, Lecture Recordings, Assignments, Slides, Quizzes, <a href="#">Course Github Classroom</a> ...) will be available in <a href="#">UTD ELearning/blackboard</a> . Quizzes/Exam required <a href="#">UTD lockdown browsers</a>
<b>Expectations</b>	<ul style="list-style-type: none"><li>• This course is designed with modules that focus on course content, learning activities, quizzes, and readings. Each module is approximately 1 - 3 weeks in length. This course will require approximately 10 hours of attention per week, so please allocate your time appropriately.</li><li>• If you know that you will be required to miss an assignment due date, you must inform me as soon as possible to make arrangements. In extenuating circumstances, it may be possible to make alternate arrangements, but you must contact me before the due date of the assignment. If you provide less than 24-hours' notice of a problem, it is possible that there may not be much that can be done. College level work requires you to plan to complete tasks in a timely manner. Failing to be prepared at least 24 hours ahead of a due date may reflect a time management problem. Please plan to complete all the assignments on time.</li></ul> <p>As the instructor in this course, I am responsible for:</p> <ul style="list-style-type: none"><li>• Providing course materials that will assist and enhance your achievement of the stated course goals,</li><li>• Providing timely and helpful feedback within the stated guidelines, and</li><li>• Assisting in maintaining a positive learning environment for everyone.</li></ul> <p>As a student in this course, you are responsible for:</p> <ul style="list-style-type: none"><li>• Reading and completing all requirements of the course in a timely manner,</li><li>• Working to remain attentive and engaged in the course and interact with your fellow students, and</li><li>• Assisting in maintaining a positive learning environment for everyone.</li></ul>
<b>Asynchronous Learning Guidelines</b>	Please read more about online/asynchronous courses and how it will apply to lectures and/or exams: <a href="https://covid.utdallas.edu/students-families-info/spring-2021-registration/">https://covid.utdallas.edu/students-families-info/spring-2021-registration/</a>

## COVID-19 Guidelines and Resources

The information contained in the following link lists the University's COVID-19 resources for students.

Please see <http://go.utdallas.edu/syllabus-policies>.

---

### Class Participation

Regular class participation is expected regardless of course modality. Students who fail to participate in class regularly are inviting scholastic difficulty. A portion of the grade for this course is directly tied to your participation in this class. It also includes engaging in group or other activities during class that solicit your feedback on homework assignments, readings, or materials covered in the lectures (and/or labs). Class participation is documented by faculty. Successful participation is defined as consistently adhering to University requirements, as presented in this syllabus. Failure to comply with these University requirements is a violation of the [Student Code of Conduct](#).

---

### Class Recordings

The instructor will record meetings of this course. Any recordings will be available to all students registered for this class as they are intended to supplement the classroom experience. Students are expected to follow appropriate University policies and maintain the security of passwords used to access recorded lectures. Unless the Office of Student AccessAbility has approved the student to record the instruction, students are expressly prohibited from recording any part of this course. Recordings may not be published, reproduced, or shared with those not in the class, or uploaded to other online environments except to implement an approved Office of Student AccessAbility accommodation. If the instructor or a UTD school/department/office plans any other uses for the recordings, consent of the students identifiable in the recordings is required prior to such use unless an exception is allowed by law. Failure to comply with these University requirements is a violation of the [Student Code of Conduct](#).

---

### Class Materials

The Instructor will provide class materials that will be made available to all students registered for this class as they are intended to supplement the classroom experience. These materials may be downloaded during the course, however, these materials are for registered students' use only. Classroom materials may not be reproduced or shared with those not in class, or uploaded to other online environments except to implement an approved Office of Student AccessAbility accommodation. Failure to comply with these University requirements is a violation of the [Student Code of Conduct](#).

---

### Course Pre-requisites, Co-requisites, and/or Other Restrictions

*Prerequisite:* CE/CS 2336 or CS 3333, and CE/CS/TE 2305 or equivalent.

*Pre- or co-requisite:* ECS 3390. (Same as CS/SE 3354)

### Course Description

- *Introduction to software life cycle models.*
- *Software requirements engineering, formal specification and validation.*
- *Techniques for software design and testing.*
- *Cost estimation models.*
- *Issues in software quality assurance and software maintenance.*

## Student Learning Objectives/Outcomes

After successful completion of this course, the students are expected to gain these:

- 1) The ability to understand software lifecycle development models
- 2) The ability to understand and apply software requirements engineering techniques
- 3) The ability to understand and apply software design principles
- 4) The ability to understand and apply software testing techniques
- 5) The ability to understand the use of metrics in software engineering
- 6) The ability to understand formal methods in software development
- 7) The ability to establish and participate in an ethical software development team
- 8) The ability to use software project management tools and techniques
- 9) The ability to use CASE tools for software development

## Required Textbooks and Materials

- 1) (**Recommended**) Craig Larman, “*Applying UML and Patterns: An Introduction to Object-Oriented Analysis and Design and Iterative Development*”, Prentice-Hall, ISBN: 013 148 9062, 2005.
- 2) (**Required**) Kung D., “*Object-Oriented Software Engineering: An Agile Unified Methodology*”, 1st ed., McGraw Hill, ISBN: 978-0073376257
- 3) Freeman, Eric, Elisabeth Robson, Bert Bates, and Kathy Sierra., “*Head First Design Patterns*” Beijing: O’Reilly, 2014.
- 4) Gamma, E., Helm, R., Johnson, R., Vlissides, J., “*Design Patterns: Elements of Reusable Object-Oriented Software*”. Addison-Wesley Pub. Co., Reading 1995.
- 5) and more..

Textbooks and some other bookstore materials can be ordered online or purchased at the [UT Dallas Bookstore](#).

## Technical Requirements

In addition to a confident level of computer and Internet literacy, certain minimum technical requirements must be met to enable a successful learning experience. Please review the important technical requirements on the [Getting Started with eLearning](#) webpage.

## Course Access and Navigation

This course can be accessed using your UT Dallas NetID account on the [eLearning](#) website.

Please see the course access and navigation section of the [Getting Started with eLearning](#) webpage for more information.

To become familiar with the eLearning tool, please see the [Student eLearning Tutorials](#) webpage.

UT Dallas provides eLearning technical support 24 hours a day, 7 days a week. The [eLearning Support Center](#) includes a toll-free telephone number for immediate assistance (1-866-588-3192), email request service, and an online chat service.

## Communication

This course utilizes online tools for interaction and communication. Some external communication tools such as regular email and a web conferencing tool may also be used during the semester. For more details, please visit the [Student eLearning Tutorials](#) webpage for video demonstrations on eLearning tools.

Student emails and discussion board messages will be answered within 3 working days under normal circumstances.

## Distance Learning Student Resources

Online students have access to resources including the McDermott Library, Academic Advising, The Office of Student AccessAbility, and many others. Please see the [eLearning Current Students](#) webpage for more information.

### **Server Unavailability or Other Technical Difficulties**

The University is committed to providing a reliable learning management system to all users. However, in the event of any unexpected server outage or any unusual technical difficulty which prevents students from completing a time sensitive assessment activity, the instructor will provide an appropriate accommodation based on the situation. Students should immediately report any problems to the instructor and also contact the online [eLearning Help Desk](#). The instructor and the eLearning Help Desk will work with the student to resolve any issues at the earliest possible time.

### **Academic Calendar**

The course calendar will be posted on eLearning.

### **Proctored Final Exam Procedures**

This course has a proctored exam requirement, please see the [UTD Testing Center](#) webpage and [Distance Learning Proctored Exams](#) webpage to make arrangements.

### **Grading Policy**

- **One team project with three planned increments (equal weight): 45%**
  - All students are required to participate in all presentations. Participation is part of the project score (10%).
  - Team members are required to work together throughout the project. You should plan on committing your time and effort to the teamwork. Teams that do not work together produce very poor results and score poorly! Teamwork, teamwork, teamwork! Keep this in mind. Make sure perform well in your team. **The peer evaluations** submitted by your peers will affect your project scores. Each negative point, i.e., “-1”, deducts 1% from your teamwork score. For example, if your team gets 90 for increment 1, and you receive five “-2” in your peer evaluations, then your score drops to 80. Teams or team members should report to the instructor as soon as possible if there are problems in the team that will affect teamwork.
  
- **Homework Assignments 15%.**
  - We will have graded assignments for most topics. They will be posted on the eLearning, and any clarifications or hints will be posted on the discussion board.
  - **No zip files please!** Only pdf or word document.
  - You will collaborate in teams of up to five students
  - Late submissions will receive a 10% penalty per day.
  - Identical or highly similar solutions could result in zero point and academic discipline.
  
- **Instead of midterm exams, we will have quizzes 15%.**
  - At the end of each module will have a short quiz that cover materials from the module.
    - **Quiz Re-take policy:** Students who miss or perform badly on the first attempt of the quiz can have one retake per quiz.
      - **Scoring:** The maximum score on a retake quiz is 80%.
      - **Replace:** If you take the retake, your new score will count and the first score is dropped.
      - **Content:** The retake quiz will be different from the one given in class but will cover the same topics.
      - **Timing:** All retakes must be completed before the end of the module period.
  
- **One Final Exam 15%.**
  - There is no Retake for the Final Exam.

○ **Participation (Discussion Board, Activities, VActivities,..) 10%.**

□ **EXERCISES**

- There are exercises in most modules. Some will be done individually; some will be done in group. They will be graded on a pass or fail basis and will be counted toward your course participation grade.
- Credit can only be received if done before the end of the module period, although if you miss one, you should do it on your own to prepare for the quizzes and final exam.

□ **DISCUSSION BOARD USE**

- We will use the discussion board throughout the semester. Participation on discussion board will be counted towards your course participation grade.
- Please ask all of your technical questions/concerns regarding the course or the assignments using the discussion board. Only email the personal questions/concerns.
- You should post about software failures, errors in the books or slides, or about topics that extend from our classroom discussion. You can respond to other students and/or rate the responses.

**Grading Policy Summary**

- Project: 45%
- Individual Homework Assignments: 15%
- Quizzes: 15%
- Final Exam: 15%
- Participation (discussion board, activities, vactivities,..): 10%

The base grading scale given below may be adjusted based upon the performance of the class as a whole:

<b>Total Score</b>	<b>&gt;=97</b>	<b>&gt;=94</b>	<b>&gt;=90</b>	<b>&gt;=87</b>	<b>&gt;=84</b>	<b>&gt;=80</b>	<b>&gt;=77</b>	<b>&gt;=74</b>	<b>&gt;=70</b>	<b>&gt;=67</b>	<b>&gt;=64</b>	<b>&gt;=60</b>	<b>&lt;60</b>
<b>Grade</b>	A+	A	A-	B+	B	B-	C+	C	C-	D+	D	D-	F

Even if you get 86.99 your grade will be “B”, not “B+” though it is so close to 87.

**Comet Creed**

This creed was voted on by the UT Dallas student body in 2014. It is a standard that Comets choose to live by and encourage others to do the same:

*“As a Comet, I pledge honesty, integrity, and service in all that I do.”*

**Academic Support Resources**

The information contained in the following link lists the University’s academic support resources for all students.

Please go to [Academic Support Resources](#) webpage for these policies.

**UT Dallas Syllabus Policies and Procedures**

The information contained in the following link constitutes the University’s policies and procedures segment of the course syllabus.

Please go to [UT Dallas Syllabus Policies](#) webpage for these policies.

***The descriptions and timelines contained in this syllabus are subject to change at the discretion of the Professor.***