

	<b>Course</b>	<b>CS3354 Section 001 Software Engineering</b>
	<b>Professor</b>	Dr. Ebru Çankaya
	<b>Term</b>	Spring 2020
	<b>Meetings</b>	Online only- via eLearning

### Professor's Contact Information

<b>Web page</b>	<a href="http://www.utdallas.edu/~exc067000">http://www.utdallas.edu/~exc067000</a>
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### TA's Contact Information

<b>TA</b>	Zijing Tian
<b>TA Office Location</b>	ECSS 4.413
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<b>TA Office Hours</b>	No time restriction. Anytime via email

### General Course Information

<b>Pre-requisites, Co-requisites, &amp; other restrictions</b>	Prerequisites: CE/CS 2336 or CS 3333, and CE/CS/TE 2305 or equivalent. Pre- or co-requisite: ECS 3390. (Same as CS/SE 3354)
<b>Course Description</b>	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.
<b>Learning Outcomes</b>	After successful completion of this course, the student are expected to gain these: <ul style="list-style-type: none"> <li>• The ability to understand software lifecycle development models</li> <li>• The ability to understand and apply software requirements engineering techniques</li> <li>• The ability to understand and apply software design principles</li> <li>• The ability to understand and apply software testing techniques</li> <li>• The ability to understand the use of metrics in software engineering</li> <li>• The ability to understand formal methods in software development</li> <li>• The ability to establish and participate in an ethical software development team</li> <li>• The ability to use software project management tools and techniques</li> <li>• The ability to use CASE tools for software development</li> </ul>
<b>Required Texts &amp; Materials</b>	Ian Sommerville, "Software Engineering", 10 <sup>th</sup> ed., Pearson, 2015, ISBN: 978-0133943030.

<b>Suggested Texts, Readings, &amp; Materials</b>	<ul style="list-style-type: none"> <li>• R. S. Pressman, B. Maxim, Software Engineering: A Practitioner's Approach 8th Edition, McGraw-Hill, ISBN: 978-0078022128.</li> <li>• S. Schach, "Object-Oriented and Classical Software Engineering", 8<sup>th</sup> ed., McGraw-Hill, ISBN: 978-0073376189.</li> <li>• Kung D., "Object-Oriented Software Engineering: An Agile Unified Methodology", 1st ed., McGraw Hill, ISBN: 978-0073376257.</li> <li>• C. Larman, "Applying UML and Patterns", 3<sup>rd</sup> ed., Prentice Hall, ISBN: 978-0131489066.</li> <li>• G. Booch, J. Rumbaugh, I. Jacobson, "The Unified Modeling Language User Guide", 2<sup>nd</sup> ed., ISBN: 078-5342267976.</li> <li>• Sommerwille, "Software Engineering", 9<sup>th</sup> ed., ISBN: 978-0137035151.</li> <li>• S. Martin, K. Fowler, "UML Distilled: Applying the Standard Object Modeling Language", 3<sup>rd</sup> ed., Addison Wesley, ISBN: 978-0201325638.</li> <li>• <a href="https://iansommerville.com/software-engineering-book/">https://iansommerville.com/software-engineering-book/</a></li> <li>• <a href="http://www.ibm.com/developerworks/rational/library/769.html">http://www.ibm.com/developerworks/rational/library/769.html</a></li> <li>• <a href="http://publib.boulder.ibm.com/infocenter/rsdp/v1r0m0/topic/com.ibm.help.download.rhapsody.doc/pdf75/tutorialj.pdf">http://publib.boulder.ibm.com/infocenter/rsdp/v1r0m0/topic/com.ibm.help.download.rhapsody.doc/pdf75/tutorialj.pdf</a></li> </ul>
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### Assignments & Academic Calendar

Week	Dates	Course Content	Assignments
1	01/13 – 01/15	Syllabus, Ch 1: Introduction, Ch 2: Software processes	Read Ch 1, Ch 2
2	01/22	Ch 3: Agile software development	Read Ch 3, HW1 issued
3	01/27 – 01/29	Ch 4: Requirements engineering	Read Ch 4, HW1 due, HW2 issued
4	02/03 – <b>02/05</b>	Ch 5: System modeling	Read Ch 5, HW2 due, HW3 issued, <b>02/05: Project proposal due (must work in a group)</b>
5	02/10 – 02/12	Ch 6: Architectural design	Read Ch 6, HW3 due, HW4 issued
6	02/17 – 02/19	Ch 7: Design and implementation	Read Ch 7, Software Design, HW4 due, HW 5 issued
7	02/24 – 02/26	Ch 8: Software testing, Unit testing with Junit	Read Ch 8, Junit tutorial, HW 5 due
8	03/02 – <b>03/04</b>	Exam 1 review, <b>03/04 Exam 1 Chapters 1, 2, 3, 4, 5, 6, 7, 8</b>	
9	03/09 – 03/11	Ch 17: Distributed software engineering Ch 18: Service-oriented software engineering	Read Ch 17, Ch 18, <b>03/13: Project Deliverable 1 due (No extension)</b>
10	<b>03/16 – 03/18</b>	<b>Spring Break</b>	
11	<b>03/23 – 03/25</b>	<b>Spring break - extended</b>	HW 6 issued
12	03/30 – 04/01	Ch 22: Project management	Read Ch 22, HW6 due, HW 7 issued
13	04/06 – 04/08	Ch 23: Project planning Ch 24: Quality management	Read Ch 23, Ch 24, HW 7 due, HW 8 issued
14	04/13 - <b>04/15</b>	Ch 25: Configuration management <b>04/15 Exam 2 Chapters 17, 18, 22, 23, 24, 25</b>	Read Ch 25, HW 8 due, <b>04/17: Project Deliverable 2 due (No extension)</b>
15	04/20 – 04/22	Recorded Final Project presentations of each group will be posted to eLearning	
16	04/27 – 04/29	Recorded Final Project presentations of each group will	

	be posted to eLearning	
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**\*: Exam 2 will be open book and open notes.**

### Course Policies

<b>Grading (credit) Criteria</b>	<p>Assignments : 20% (2.5 % each)  Exam 1 : 25%  Exam 2 : 25%  Final Project : 30% (15% deliverable1, 15% deliverable2)</p> <p><b>Letter grades will be assigned as follows:</b>  98-100 A+  92-97 A  90-91 A-  88-89 B+  82-87 B  80-81 B-  78-79 C+  72-77 C  70-71 C-  68-69 D+  62-67 D  60-61 D-  Below 60 F</p> <p>All assignments and exams (other than the term project) are to be individual efforts. Please do not collaborate with other students. Copying of assignments or exams, in whole or in part, from other sources will be considered an act of scholastic dishonesty. This policy includes copying from other students, from assignments from previous semesters or from the Internet.  Also, for Spring 2020 semester only, please visit the following URL issued by University for temporary grading policy exceptions.  <a href="https://www.utdallas.edu/registrar/temporary-policy-exceptions-for-cr-nc-and-p-f-grading/">https://www.utdallas.edu/registrar/temporary-policy-exceptions-for-cr-nc-and-p-f-grading/</a>. Please know that the instructor is still required to enter the letter grade to Galaxy as your end of semester grade. We are informed that your choice will be applied by the Registrar's Office, not by the instructor.</p>
<b>Assignments</b>	<p>There will be 8 homework assignments during the semester. Homeworks will be posted in eLearning and should be turned in via <b>eLearning ONLY</b>. <b>No e-mail submissions are accepted. No late submissions are accepted. So, please plan accordingly, do not leave your submissions to the last minute. Everybody submits his/her work very easily via eLearning, you can do it, too. If you encounter a problem during elearning submission, please contact 24/7 elearning Help IMMEDIATELY. This help is available 24/7 at:</b></p> <p><b>eLearning Help URL:</b> <a href="http://www.utdallas.edu/elearning/eLearningHelpdesk.html">http://www.utdallas.edu/elearning/eLearningHelpdesk.html</a>  <b>eLearning Help Phone:</b> 1 866 588 3192</p> <p><b>Any submission that is missed will be graded with a zero. Please do not insist for exceptions.</b></p>
<b>Final Project</b>	<p>There will be a Final Project that will be posted in eLearning and should be turned in via <b>eLearning ONLY</b>. Students will need to work in groups. <b>No e-mail submissions are accepted. No late submissions are accepted.</b></p>
<b>Make-up Exams</b>	

	A student can <b>ONLY</b> get a make up exam if it was missed due to an extreme emergency (proved by official documents), and arrangements are made <b>BEFORE</b> the exam date.
<b>Extra Credit</b>	No extra credit is offered.
<b>Late Work</b>	No late submission is accepted.
<b>Class Attendance</b>	<p>Attendance will be taken and students are responsible for everything done and said in the class, such as detailed explanation of course slides, extra examples, etc. So, regular attendance will be beneficial to students.</p> <p>It is the Department's attendance policy that <b>three consecutive absences leads to one letter grade drop. Four consecutive absences leads to an F. Please review the URL for the attendance policy for our Department.</b></p> <p><a href="http://cs.utdallas.edu/education/undergraduate/attendance-policy/">http://cs.utdallas.edu/education/undergraduate/attendance-policy/</a></p> <p>Picture taking, recording during lectures are not allowed. Students are encouraged and allowed enough time to take notes.</p>
<b>Computer use</b>	Students are welcome to bring and use laptops to access the course material and take notes. Other than these purposes, laptop use is discouraged as it causes distraction for the user and other students. Taking pictures, recording part of or complete lectures via any means are not allowed. Please understand that these rules are put in place based on student feedback.
<b>Cellphone use</b>	Students can use cellphones to access course material. Taking pictures, recording part of or complete lectures via any means are not allowed. Please understand that these rules are put in place based on student feedback.
<b>Comet Creed</b>	<p>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:</p> <p><i>"As a Comet, I pledge honesty, integrity, and service in all that I do."</i></p>
<b>UT Dallas Syllabus Policies and Procedures</b>	<p>The information contained in the following link constitutes the University's policies and procedures segment of the course syllabus.</p> <p>Please go to <a href="http://go.utdallas.edu/syllabus-policies">http://go.utdallas.edu/syllabus-policies</a> for these policies.</p>

***These descriptions and timelines are subject to change at the discretion of the Professor.***