

CS 791 Special Topics – Software Engineering (Section 1005) Fall, 2019

Course Information

Instructor Information:

Instructor: Sergiu Dascalu
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Office Hours: Tuesday 10:00 am – 12:00 pm

Course Description:

Lecture + Lab: 3 + 0; Credit(s): 3

Special topics in Computer Science. Topic: software engineering.

This course will explore research topics on software engineering, encompassing principles, methods, and tools. Areas of research include software processes, requirements analysis and specification, design, prototyping, implementation, validation and verification, software modeling, model driven engineering, integrated development environments, and case studies.

Course Pre/Co-requisites:

Prerequisite: Instructor's approval

Required texts, course materials:

Required materials:

- Research papers assigned by the instructor or selected by students

Recommended textbook:

- Ian Sommerville, Software Engineering, 10th edition, Addison-Wesley, 2015.

Initial web pointers:

- ❖ The course website: www.cse.unr.edu/~dascalus/se2019.html
- ❖ IEEE's Digital Library, via www.ieee.org
- ❖ ACM Digital Library, via www.acm.org
- ❖ The Software Engineering Institute, at Carnegie Mellon University, www.sei.cmu.edu
- ❖ IEEE Computer Society's Technical Council on Software Engineering, www.tcse.org
- ❖ The Object Management Group, www.omg.com

Unique class procedures /structures:

Class presentations by all students on assigned or selected research papers focused on software engineering ; Course project and, based on the project, course paper in conference submission format.

Student Learning Outcomes:

Our graduates will have:

G-SLO #1. An ability to apply engineering and computer science research and theory to advance the art, science, and practice of the discipline.

G-SLO #2. An ability to design and conduct experiments as well as to analyze, interpret, apply, and disseminate the data.

G-SLO#3. An understanding of research methodology.

Course Requirements:

Grading scheme (tentative, subject to small modifications)

- Assignments & project parts 50%
- Midterm exam 25%
- Course paper 15%
- Presentations/paper discussions 7%
- Class participation 3%
- TOTAL 100%

Grading Criteria, Scale, Policies, and Standards:

Grading scale

- A 90 -100 [maximum 100]
- A- 87 - 89
- B+ 84 - 86
- B 80 - 83
- B- 77 - 79
- C+ 74 - 76
- C 70 - 73
- C- 67 - 69
- D+ 64 - 66
- D 60 - 63
- D- 50 - 59
- F < 50

Passing conditions (all must be met):

- At least 50% overall &
- At least 50% in project parts and assignments &
- At least 50% in course paper
- For grade A: at least 90% overall, at least 90% in class participation, and at least 70% in test
- There are no make-up tests or homework in this course
- Note that poor class participation can significantly affect your grade [well beyond 3%]. Valid excuses for absences include being sick, major family/personal problems, and participation to conferences or other professional events approved by the instructor. Such excuses DO NOT include being busy at your paid or volunteer job work, or for preparing for or attending other courses.

Late submission policy:

- Maximum 2 late days per assignment/project deliverable
- Each late day penalized with 10%
- No subdivision of late days
- No late days for presentations and tests
- Example: a 90/100 worth assignment gets 81/100 if one day late ($90 \times 0.9 = 81$) or 72/100 if two days late ($90 \times 0.8 = 72$)

Course Calendar or Topics Outline:

Tentative schedule (subject to small modifications):

Week #	Dates (M, W)	Contents
1	Aug 26, 28	Course syllabus, Students' introduction
2	Sep - , 04	Lecture, A#1 given
3	Sep 09, 11	Lectures
4	Sep 16, 18	Lectures, A#2 given, A#1 due
5	Sep 23, 25	Lecture presentations by students (#1), A#3 given A#2 due
6	Sep 30, Oct 02	Lecture presentations by students (round #1)
7	Oct 07, 09	Lecture presentations by students (round #1), A#4 given, A#3 due

8	Oct 14, 16	Lecture presentations by students (round #1) P#1 given, A#4 due
9	Oct 21, 23	Lectures P2 given, P#1 due
10	Oct 28, 30	Lectures
11	Nov 04, 06	Lecture, student presentations (round 2) P#3 given, P#2 due
12	Nov -, 13	Student presentations (round #2)
13	Nov 18, 20	Student presentations (round #2)
14	Nov 25, 27	Midterm on November 25, 2019; Lecture
15	Dec 02, 04	Project demos, P#3 due
16	Dec 09, -	Project demos, Papers due Wednesday December 18

University Policies

Statement on Academic Dishonesty:

The University Academic Standards Policy defines academic dishonesty, and mandates specific sanctions for violations. See the University Academic Standards policy: [UAM 6,502](#).

Statement on Disability Services:

Any student with a disability needing academic adjustments or accommodations is requested to speak with me or the [Disability Resource Center](#) (Pennington Achievement Center Suite 230) as soon as possible to arrange for appropriate accommodations.

This course may leverage 3rd party web/multimedia content, if you experience any issues accessing this content, please notify your instructor.

Statement on Audio and Video Recording:

Surreptitious or covert video-taping of class or unauthorized audio recording of class is prohibited by law and by Board of Regents policy. This class may be videotaped or audio recorded only with the written

permission of the instructor. In order to accommodate students with disabilities, some students may have been given permission to record class lectures and discussions. Therefore, students should understand that their comments during class may be recorded.

Statement on Equal Opportunity:

The University of Nevada, Reno is committed to providing a safe learning and work environment for all. If you believe you have experienced discrimination, sexual harassment, sexual assault, domestic/dating violence, or stalking, whether on or off campus, or need information related to immigration concerns, please contact the University's Equal Opportunity & Title IX office at 775-784-1547. Resources and interim measures are available to assist you. For more information, please visit the [Equal Opportunity and Title IX](#) page.

Statement on Academic Success Services:

Your student fees cover usage of the [Math Center](#) (775) 784-4433, [Tutoring Center](#) (775) 784-6801, and [University Writing Center](#) (775) 784-6030. These centers support your classroom learning; it is your responsibility to take advantage of their services. Keep in mind that seeking help outside of class is the sign of a responsible and successful student.

Statement on University Math Center:

The University Math Center (UMC) is focused on helping students with mathematical and statistical concepts. While mathematics is used extensively in engineering, *the UMC does not have the resources to help students with engineering courses*. Engineering students are encouraged to use the UMC for help in their math classes, and they are welcome to use its computer lab and study area any time – regardless of course. However, UMC tutors cannot answer questions regarding engineering courses.

Statement on University Athletics

If you are involved with any **university-sponsored** athletic activities that will have an impact on your attendance, you must provide the course instructor with a letter from your coach and/or the UNR Athletic Department as soon as possible, but no later than the end of the second week of classes. This should include the official schedule of your activities which will impact your attendance throughout the semester. You must also advise the Instructor one week in advance of any absences related to the athletic activities.

Instructor Policies

Statement on Illness or Other Personal Issue:

If you are sick or have a health-related reason for not attending class, let the instructors know as soon as possible about this situation. Same, for a major family or personal issue.

Statement on Course/Policy Modification:

The instructor reserve the right to add to, and/or modify any of the above policies as needed to maintain an appropriate and effective educational atmosphere in the classroom and the laboratories. In the case that this occurs, all students will be notified in advance of implementation of the new and/or modified policy

Statement on Student Engagement:

There will be a good deal of interaction and class/group activity in this course. For that reason, students are expected to be engaged in, and focused on, the classroom discussion and/or activities. In addition, everyone involved in this class is expected to act in a professional manner, and interact with her or his peers with that same professional demeanor, which precludes rude or inappropriate behavior.