

Department of Computer Science and Engineering
University of Nevada, Reno

**CS 709 Topics in Advanced Computer Science
(Software Engineering)**

COURSE SYLLABUS

Lectures: TR 3:00 – 4:15 pm, CFA-18

Instructor: Dr. Sergiu Dascalu
Room SEM-236
Tel: (775) 784-4613
E-mail: dascalus@cse.unr.edu
Web: www.cse.unr.edu/~dascalus

Office hours: Wednesdays 2:00 – 3:00 pm or by appointment or chance, SEM-236

Course outline: 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, testing, software modeling, software tools, and case studies. The course will allow the students to broaden their knowledge of advanced software engineering concepts, principles, techniques and tools, study relevant research publications in the field, prepare and present a high quality software engineering project and, based on this project, write a paper that could be submitted to a scientific conference.

Pre-requisites: CS 425 Software Engineering or instructor's consent.

Texts: Required textbooks:

- The course will be based on research papers, book chapters, and other related publications.
- Possibly, a reference book that will be selected by September 8.

Recommended text(s) [this list will be expanded during the semester]:

- Ian Sommerville, *Software Engineering*, Pearson, 10th Ed., 2017.

Initial www pointers:

- Course website www.cse.unr.edu/~dascalus/tacs2017.html
- IEEE's Digital Library, via www.ieee.org
- ACM Digital Library, via www.acm.org
- The Software Engineering Institute, www.sei.cmu.edu
- The Object Management Group, www.omg.com,

Grading scheme (subject to small modifications):

• Assignments	10%
• Presentations	10%
• Midterm test	25%
• Project & paper	50%
• Class participation	5%

Grading scale (correspondence numerical grade – letter grade):

A	90 -100	[maximum 100]
A-	87 - 89	
B+	84 - 86	
B	79 - 83	
B-	76 - 78	
C+	73 - 75	
C	68 - 72	
C-	65 - 67	
D+	61 - 64	
D	56 - 60	
D-	50 - 55	
F	< 50	

Notes on grading:

- Requirements for grade A: at least 90% overall, at least 90% in class participation, and at least 60% in test
- Poor class participation can significantly affect your overall grade
- There are no make-up tests or homework in this course

Passing conditions (all must be met):

- 50% overall &
- 50% in test &
- 50% in project and paper &
- 50% in assignments, presentations and class participation

Late submissions:

Late submissions of homework will be penalized with a deduction of 10% of the grade per late day, to a maximum of two late days for each submission. No material will be accepted after two days past the deadline. For example, an assignment that is worth 90/100 points will receive $90 \cdot 0.9 = 81/100$ points if it is one day late. The same assignment will receive $90 \cdot 0.8 = 72/100$ points if it is two late days and it will not be accepted if it is more than two days late. Late days are not divisible in subunits.

Statement on academic dishonesty:

Cheating, plagiarism or otherwise obtaining grades under false pretenses constitute academic dishonesty according to the code of this university. Academic dishonesty will not be tolerated and penalties can include canceling

a student's enrollment without a grade, giving an F for the course or for the assignment. For more details, see the [University of Nevada, Reno General Catalog](#).

Legal notices on the World Wide Web:

When accessing www resources such as downloadable software, technical reports, papers, on-line tutorials, etc., do not forget to read their accompanying legal notices and comply with their provisions.

Disability statement:

If you have a disability for which you will need to request accommodations, please contact as soon as possible the instructors or the Disability Resource Center (Thompson Student Services - 107).

Academic success services:

Your student fees cover usage of the Math Center (784-4433 or www.unr.edu/mathcenter/), Tutoring Center (784-6801 or www.unr.edu/tutoring/), and University Writing Center (784-6030 or http://www.unr.edu/writing_center/). 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 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 be given permission to record class lectures and discussions. Therefore, students should understand that their comments during class may be recorded.

Student learning outcomes:

Upon completion of this course:

1. Students will have an ability to apply engineering research and theory to advance the art, science, and practice of the discipline.
2. Students will have an ability to design and conduct experiments as well as to analyze, interpret, apply, and disseminate the data.
3. Students will have an understanding of research methodology.