

**Department of Computer Science and Engineering  
University of Nevada, Reno**

**CS 691z/CS 791z Topics on Software Engineering**

**Spring 2007**

**Lectures:** TR, 2:30 – 3:45 pm, AGN (SEM-201) or LME-316

**Instructor:** Dr. Sergiu Dascalu  
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**Office hours:** TR 5:00 – 6:00 SEM-236

**Course outline:** This course explores research and development 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, evolution, documentation, project management, UML-based modeling, development environments, and domain-specific applications. The course will allow the students to broaden their knowledge of 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 textbook [to be confirmed]:

- Albert Endres, Dieter Rombach, *A Handbook of Software and Systems Engineering: Empirical Observations, Laws, and Theories*, Pearson Addison-Wesley, 2003. ISBN: 0-321-15420-7

Recommended texts [this list will be expanded during the semester]:

- Ian Sommerville, *Software Engineering*, Addison Wesley, 8<sup>th</sup> Ed., 2006.

**Initial www pointers:**

- Course website [www.cs.unr.edu/~dascalus/tse2007.html](http://www.cs.unr.edu/~dascalus/tse2007.html)
- IEEE's Digital Library, via [www.ieee.org](http://www.ieee.org)
- ACM Digital Library, via [www.acm.org](http://www.acm.org)
- The Software Engineering Institute, [www.sei.cmu.edu](http://www.sei.cmu.edu)
- IEEE CS's Technical Council on Software Engineering, [www.tcse.org](http://www.tcse.org)
- The Object Management Group, [www.omg.com](http://www.omg.com),
- IBM / Rational Software, [www.rational.com](http://www.rational.com)

**Grading scheme** (subject to slight modifications):

- Assignments: A1 tool, 2 background, [3] textbook 10%
- Presentations: PRES1 tool, [2] textbook, 3 project, 4 book 15%
- Midterm test: TEST 20%
- Project: P1, 2, 3 30%
- Paper: DRAFT, PPR 20%
- Class participation: PART\* 5%

\* Assumes good presence; a large number of absences will affect the grade much more significantly

**How CS791z differs from CS691z:**

- One more assignment [A3]
- One more presentation [PRES2]
- Longer paper, by 1 page 2-column IEEE format
- [Likely] One more question in the midterm test

**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
- 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 assigned work 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,  $90 \cdot 0.8 = 72/100$  points if it is two days late, and will not be accepted if it is more than two days late. Note that late days are not divisible in subunits. Late days are not allowed for presentations and test.

**On plagiarism and cheating:**

Plagiarism and cheating will not be tolerated. It will be dealt with according to the policies of the University of Nevada, Reno regarding academic dishonesty. Please read these policies at [www.unr.edu/stsv/acdispol.html](http://www.unr.edu/stsv/acdispol.html)

**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.

## Tentative schedule CS 691z/CS 791z Topics on SE Spring 2007

Week	Class Dates	Contents
1	Jan 23, 25	Course syllabus: course objectives, outline, organization <b>Students' introduction</b>
2	Jan 30 & Feb 1	Lectures by the instructor; Draw for order of presentations
3	Feb 6, 8	Lectures by the instructor <b>Project teams set up (Feb 8)</b> <b>A#1 due – SE tool (Feb 9)</b>
4	Feb 13, 15	Individual project meetings with the instructor
5	Feb 20, 22	<b>Presentations by students based on A#1 (PRES-1)</b> <b>A#2 due – Background (Feb 19)</b>
6	Feb 27, Mar 1	<b>Presentations by students based on A#1 (PRES-1)</b> <b>Project concept due (P1- Feb 26)</b>
7	Mar 6, 8	<b>A#3 due, CS791z only, textbook presentation (Mar 5)</b> <b>Presentations by students based on A#3 (PRES-2, text, CS791z only)</b>
8	Mar 13, 15	Lectures by the instructor <b>Project specification due (P2- Mar 16)</b>
9	Mar 20, 22	<i>Spring break, no classes</i>
10	Mar 27, 29	Lectures by the instructor <b>Project design due (P3 - Mar 30)</b>
11	Apr 3, 5	<b>Invited talk</b> & Lecture by the instructor, recap for midterm exam <b>Paper draft due (DRAFT – Apr 6)</b>
12	Apr 10, 12	Lecture by the instructor <b>Midterm exam (TEST - April 12)</b>
13	Apr 17, 19	<b>Presentations by students - project (PRES-3)</b>
14	Apr 23, 25	<b>Presentations by students – additional book reading (PRES-4)</b>
15	Apr 30, May 2	<b>Presentations by students - additional book reading (PRES-4)</b>
16	May 7	<b>Project implementation (demos) due (P4 - May 7)</b> <b>Paper due (PPR - May 14)</b>