CS 4263 — SOFTWARE ENGINEERING I — FALL 2010

Lesson Plan and Project Dates

Instructor	Rex Page	**Instructor Office Hours - DEH 252**	
Phone/email	page@ou.edu	Tues 1:00-2:00, Wed 3:00-4:00, Thurs 1:30-2:30	
Class Meetings	TR 3:00-4:15, CEC 121	**Website** https://learn.ou.edu	
Assistant	Meghan Rieke	**Teaching Assistant Office Hours - DEH 115**	
	meghanrieke@ou.edu	Mon 1:45-2:45, Wed 12:00-1:00, Thurs 9:30-10:30	

Reading Sources

SE	*A Discipline for Software Engineering*, Humphrey, Addison Wesley, 1995
CAR	*Computer-Aided Reasoning: An Approach*, Kaufmann *et al*, Kluwer, 2000 http://www.lulu.com/content/1746161
CEth	*Ethics and Technology*, Herman Tavani, Wiley, 2007
AoSI	Articles on Software Inspections (CS4263 reserve, Engineering Library)
ACL2	ACL2 Download (course website), ACL2 Tutorial (Google ACL2)
HtDP	might help: *How to Design Programs*, Felleisen *et al*(online:Google HtDP)
TLS	might help: *The Little Schemer*, Friedman and Felleisen, MIT Press, 1995

Required Work

Individual Projects – *see note at bottom of page about effects of computer crashes*	50%
Team Projects – *grades scaled by peer evaluations (evals due with each proj)*	25%
Final Examination	25%

Lesson Plan

Underlined *projects indicate due dates.*

Reading assignments in italics: "CAR 1-2" means Chs 1 and 2 of Computer Aided Reasoning text

BO = *break-out rm Reserve a DEH room*

Download Tools *from course website*

week	*Tues*	*project / reading*	*Thurs*	*project / reading*
1	Aug 24	*CAR 1-2, SE 1-3*	Aug 26	*CAR 3-4, SE 4-5*
2	Aug 31	*CEth 2-3*	Sep 2	*CEth 4*
3	Sep 7	**iEx1**, Predicate-based testing	Sep 9	*CAR 5*, Mechanized logic
4	Sep 14	**iEx2**, ACL2 file i/o, PROBE, *SE 4-5*	Sep 16	**iEthRpt**, SE on the job(Mercer) *DEH 320*
5	Sep 21	Course overview	Sep 23	*SE 4-5*, Software estimation
6	Sep 28	**iEx3**, *SE 10*, Software design	Sep 30	*CAR 8-9*, The Method
7	Oct 5	**iEx4dsgn**, Predicate-based tests	Oct 7	*CAR 10*, Formulating theorems
8	Oct 12	Theorem formulation and proof	Oct 14	**iEx4**, *AoSI*, Design/code review
9	Oct 19	Software architecture	Oct 21	**iEx5dsgn**, Modular ACL2
10	Oct 26	Modular ACL2	Oct 28	**iEx5**, tSumm (work) **BO**
11	Nov 2	**tSumm**, tDsgn (work) **BO**	Nov 4	SE in industry (K Crawford) *DEH 320*
12	Nov 9	tDsgnRvw (work) **BO**	Nov 11	Test-driven development (J Sharp)
13	Nov 16	**tDsgnRvw**, **tDsgn**, tImpl(work)**BO**	Nov 18	tImpl (work) **BO**
14	Nov 23	tCodeRvw (work) **BO**	Nov 25	Thanksgiving break
15	Nov 30	**tCodeRvw**, tImpl (work) **BO**	Dec 2	tImpl (work) **BO**
16	Dec 7	tPoster(work), tLOCtbl(work) **BO**	Dec 9	**tLOCtbl**, **tImpl**, Review

Friday, Dec 10, 3-5pm, Devon Atrium **tPoster**

Final Examination: Wednesday, Dec15, 4:30-6:30, class meeting room

Learning Goals Successful students will learn an effective, measurable process for software development, will have applied the process in projects of moderate complexity, and will be prepared to apply it in complex projects. Students will work individually and in teams to analyze and apply software processes, estimate software size from designs, formally review software designs and code, and design and develop software with a focus on preventing defects.

Readings Reading assignments noted in Lesson Plan by reference-abbreviation and chapter numbers (*eg*, *SE 1-2* means Chapters 1 and 1 of the Humphrey text).

Lectures Lectures discuss assigned reading. (Some lectures have no assigned reading.)

Projects Project due-dates indicated in Lesson Plan by underlined items (*eg*, **iEx4**, "*i*" indicates individual project, "*t*" team project). See course website for project details. "Work" indicates in-class work period.

ABET Data is being gathered in this course for accreditation purposes on many *ABET Objectives*

Instructor Eval The College of Engineering utilizes student ratings as one of the bases for evaluating the teaching effectiveness of each of its faculty members. The results of these forms are important data used in the process of awarding tenure, making promotions, and giving salary increases. In addition, the faculty uses these forms to improve their own teaching effectiveness. The original request for the use of these forms came from students, and it is students who eventually benefit most from their use. Please take this task seriously and respond as honestly and precisely as possible, both to the machine-scored items and to the open-ended questions.

Dog Ate Homework? Computer crashes will not serve as excuses for late papers. Save your files frequently in a repository outside your computer. SVN repositories are available for this purpose. Send requests to the instructor.

October 12, 2010 8:06 pm