

Course **CSC 532 - Advanced Topics in Software Engineering**

Description/Goals This course is a graduate level reading/research oriented-class in software engineering. Students will not only learn currently well-know methodologies but also will (hand-on) experience with currently state-of-art software engineering processes and tools. Following selected research topics of current interests in software engineering will be studied: (1) Service Engineering/management process; (2) software engineering tools (IDE, configuration/build); (3) software metrics ; (4) component-based software engineering; (5) reliability software engineering & Verification; (6) formal specification techniques; etc.

Prerequisites CSC 230 or consent of instructor

Time & Room T-TH 8 - 9:50, Nethken 105

Office Hours M-F 1-3:30pm

Course URL <http://www.latech.edu/~box/aswengr.htm>

Instructor Dr. Chokchai (Box) Leangsuksun, box@latech.edu (318) 257-3291

Grader TBA

Texts

1. **Scott Kendall, Unified Process Explained, The, 1/e, ISBN-0-201-74204-7**
2. Wake C. William, Extreme Programming Explored, 1/e,ISBN-0-201-73397-8 (optional)
3. In addition to materials from the above main textbooks, I'll provide more references (URL or some books) when we discuss on some particular topics in the research/term projects.

Evaluation

Term Project	35%
Research Paper	15%
Examinations	35%
Class Participation	5%
Class Assignments/Presentations	10%

PEER & Presentation EVALUATION:

- Peer evaluations will be performed on the final day of the class or team assignment due date.

- These evaluations will be confidential and will be used in computing an individual's participation score (30% of course team assignment credit).
- Click here for the evaluation form.
- Presentations will be graded using this grade sheet.

Grading

Percentage points	Grade
92 and above	A
80 - 91	B
70 - 79	C
60 - 69	D
< 60	F

Projects See the class handout

Research Papers/presentations Schedule will be announced later

Other Policies:

- **“Students needing testing or classroom accommodations based on a disability are encouraged to discuss those needs with me as soon as possible.”** (Refer students who do not present an accommodations memo from the Office of Disability Services to that office or to www.latech.edu/ods for assistance.)
- **Academic Honor Code** (<http://www.latech.edu/documents/honor-code.pdf>).
In accordance with the Academic Honor Code, students pledge the following: Being a student of higher standards, I pledge to embody the principles of academic integrity.
- **“Emergency Notification System: All Louisiana Tech students are strongly encouraged to enroll and update their contact information in the Emergency Notification System. It takes just a few seconds to ensure you’re able to receive important text and voice alerts in the event of a campus emergency. For more information on the Emergency Notification System, please visit <http://ert.latech.edu>.**

Class Materials

Date	Topics
	Class syllabus, Introduction & EKG example
	Intro to real-world software development & Unified Process
	Intro to OO in UML flavor , what's expected from Project plan and Term Paper & Project plan template
	Intro to OO in UML flavor and quick UML ref guide from Rational
	Chapter 2 Requirement workflow and suggested term paper topics and timeline sample1 & sample2... Requirement

	document template.
	Chapter 3 Analysis workflow
	Chapter 3 Analysis workflow (continued)
	Chapter 4 Design workflow and assignment 1 handout
	Deployment Diagram
	Change & Configuration Management
	Chapter 5 Implementation workflow & (continued), build tools, make sample and decision/assessment for readiness in software, ANT, and its sample
Oct 10, 2013	Mid term exam
	Interface review and discussion among team
	Chapter 6 test workflow, Acceptance & Defect Criteria and CVS .. homework # 3 (Make and CVS/SVN)
	Chapter 7 Supporting Workflow
	Software metrics
	Quantify non-functional requirement metrics
	Students' presentations
	More case studies
Nov 7, 2013	Final Exam

Code of Honor

No Cheating! Please review [Dr. Phoha's Policy on Plagiarism](#) for your writing guideline.

News