

CIS 4298.001 Syllabus

Course:	CIS 4298.001
Course Title:	Software Engineering
Time:	M 8:00 – 9:50, F 9:00 – 9:50, W 8:00 – 9:50
Place:	MF TL 1B W CC 200
Instructor:	Paul Wolfgang
Instructor Office:	TBA
Instructor Phone:	215-204-5155
Office Hours:	MWF 3:00 – 5:00 Or By Appointment. Feel free to drop in Try to verify that I will be in my office before making a length trip to see me. I sometimes have other commitments that take me away from my office, even during office hours.
Course Web Page:	www.cis.temple.edu/~wolfgang and Blackboard
Prerequisites:	C or better in: CIS 3223 Data Structures and Algorithms CIS 3207 Introduction to Systems Programming and Operating Systems
Textbooks:	<i>Software engineering Modern Approaches</i> Eric J Braude and Michael E. Bernstein John Wiley & Sons, Inc. ISBN 978-0-471-69208-9 <i>Introduction to the Personal Software Process</i> Watts S. Humphrey SEI Series in Software Engineering Addison-Wesley ISBN 0-201-54809-7
Course Description	This course presents the general principles that serve as the foundation of software engineering. The student is introduced to the broader context of system analysis, learns how total system requirements are analyzed and how decisions are made to allocate various functions among hardware, software, and people. The software lifecycle is examined. The course presents some professional issues, including accountability of the software engineer in complex systems and legal issues and laws that relate to software. Introduces database concepts and graphical user interfaces.
Course Goals:	This is an introduction to software development techniques that stresses development life cycles, the confirmation of requirements, on-time performance, and the construction of software that will be well tested and

efficiently maintained.

Individual software development and personal time management are introduced through the Software Engineering Institute's (SEI) Personal Software Process.

Object oriented analysis and design are emphasized along with the Unified Modeling Language (UML) and the Unified Software Development Process (USDP).

Small teams (4-5) will be organized to develop systems that incorporate the concepts introduced in the class. The techniques will be applied to real world projects in 4389.

This is a writing intensive course. Writing assignments will constitute 50% of your grade. Writing assignments will include:

An analysis of your personal software process based upon the Personal Software Process lab assignments.

Another assignment will be to complete a combined functional specification (requirements) and design document (technical). This document will be developed by the team.

The midterm and final exams will also be in an essay format.

Course Grading:	Mid-Term Exam	10%
	Final Exam	20%
	Labs	10%
	PSP Paper	20%
	Other Writing Assignments	10%
	Team Project	20%
	Attendance	10%

Lab Grading:

There will be two types of lab assignments: Initially you will be given 6 programming assignments. The primary purpose of these assignments is for you to practice following a defined development process and to collect personal process data. The labs are due one week after they are assigned. Labs must be on time and complete to receive full credit. Late submission will result in a reduced lab grade. All labs must be completed by Wednesday, October 20 to receive credit for the lab assignments.

PSP Paper:

The purpose of the PSP Paper is to demonstrate that you understand the process data you collected during the labs. Therefore, you cannot possibly write a PSP paper without doing the labs and collecting the data. The PSP Paper will be graded based on its contents – a grading rubric will be distributed when the paper is assigned.

Exam Dates:	Mid-term:	Friday, Oct. 23
	PSP Paper due:	Wednesday, Nov. 10
	Final Exam:	Wednesday, Dec. 15

Attendance Policy: Attendance is required and will count as 10% of your grade. Arriving late for class

counts as ½ absence. Absence will be excused if notice is received in advance.

Weekly Topic Schedule

Week	Date	Monday Lectures 8:00 – 9:50	Friday Lectures 9:00 – 9:50	Wednesday Lab 8:00 – 9:50
1	Aug 30	Introduction What is Software Engineering Braude Ch 1 Introduction to PSP Humphrey Ch 1 & 2	Quality and Metrics Braude Ch2	Lab 1
2	Sep 6	Labor Day	Software Process Braude Ch 3	Lab 2
3	Sep 13	Software Project Management Braude Ch 7	Humphrey Ch 5 & 6	Lab 3
4	Sep 20	Requirements Analysis Braude Ch 10	Humphrey Ch 11	Lab 4
5	Sep 27	High-Level Requirements Braude Ch 11	Humphrey Ch 7 & 8	Lab 5
6	Oct 4	Software Design Braude Ch 15	Humphrey Ch 9	Lab 6
7	Oct 11	Unified Modeling Language Braude Ch 16	Review for MID TERM	Lab Makeup PSP Paper Assigned
8	Oct 18	MID TERM EXAM	Team Assignments	Team Project All Labs due for Credit
9	Oct 25	Principles of Implementation Braude Ch 22	Team Presentations	Team Project
10	Nov 1	Quality and Metrics Braude Ch 23	Team Presentations	Team Project
11	Nov 8	Refactoring Braude Ch 24	Team Presentations	Team Project PSP Paper Due
12	Nov 15	Software Testing Braude Ch 25	Team Presentations	Team Project
13	Nov 22	Unit Testing Braude Ch 26	THANKSGIVING	Team Presentations (Class meets Wed.)
14	Nov 29	Integration Testing Braude Ch 27	Team Presentations	Team Project
15	Dec 6	Team Presentations Final Presentation Dry- Run	Study Day Final Project Presentation	Team Project (last day of classes)

Week	Date	Monday Lectures 8:00 – 9:50	Friday Lectures 9:00 – 9:50	Wednesday Lab 8:00 – 9:50
	Dec 13	Final Exam Week Final Exam, Wednesday 12/15 8:00 – 10:00		

Other Important Information

Disability Disclosure

Any student who has a need for accommodation based on the impact of a disability should contact me privately to discuss the specific situation as soon as possible. Contact Disability Resources and Services at 215- 204-1280 in 100 Ritter Annex to coordinate reasonable accommodations for students with documented disabilities.

Academic Freedom

*Freedom to teach and freedom to learn are inseparable facets of academic freedom. The University has a policy on Student and Faculty and Academic Rights and Responsibilities (Policy #03.70.02) which can be accessed through the following link:
http://policies.temple.edu/getdoc.asp?policy_no=03.70.02*

Academic Honesty

Academic cheating (such as plagiarism, copying during an exam, copying homework, stealing files and passwords, etc.) is strictly prohibited in this course. The penalty for the first offense will normally be an F in the course. A subsequent offense (in this or any other course) may also be referred to the University Disciplinary Committee.

No collusion what-so-ever during an exam will be tolerated. In particular, no talking or other sharing of information (for example during open book exams) is permitted. Keep your eyes on YOUR paper.

IGNORANCE OF ACCEPTABLE GUIDELINES OF CONDUCT IS NO EXCUSE.

http://policies.temple.edu/getdoc.asp?policy_no=03.70.12

Dates to Remember

First Day Of Class: Monday, August 30, 2010

Last Day to Drop: Monday, September 13, 2010

Last Day to Withdraw: Monday, November 1, 2010

NOTE: You can only withdraw from a course once. You can only withdraw from a total of five courses.