

CS 230 -- Spring 2015
Introduction to Software Engineering
MWF 3-3:50 801 ESB
Lab M 1-2:50, W 1-2:50, and R 5-6:50 pm

Policies and Procedures

Instructor: Cindy Tanner **E-Mail:** cindy.tanner@mail.wvu.edu
WWW URL: www.csee.wvu.edu/~tanner
Office: 951 ESB **Phone:** 293-9138
Office Hours: Monday 1-2:50, Wednesday 1-2:50,
Thursday 1-3, Friday 1:30-2:50 and by Appointment

Lab Instructor: Billy Hardy

Text: Kung, Object-Oriented Software Engineering, An Agile Unified Methodology

Pre-requisite: CS 111, minimum grade of C.

Grading: The requirements for this class will be a midterm and final exam, a group project, and assigned work for lab. The breakdown of percentages is as follows:

Midterm Exam	25%	Friday Feb 27th
Final Exam	30%	Wednesday May 6 11-1
Group Project	25%	Final Presentation: In Lab the week of April 27th
Lab Grade	20%	

Audits: This class can NOT be taken for audit credit.

THERE WILL BE NO MAKEUP EXAMS without prior approval.

Letter Grades will be assigned as follows:

90%-100%	A
80%-89%	B
70%-79%	C
60%-69%	D
< 60%	F

Attendance: Attendance is mandatory however it will not be kept track of formally. All students are responsible for all material covered during lectures and/or assigned to be done outside of class. Since you are not required to attend if you choose to you should be fully present thus, **CELL PHONES CAN NOT BE USED** in any way during class.

Late Assignments: No assignment will be accepted late under any circumstances, turn in whatever is done at the due date/time...partial credit is better than none.

Course Objectives: The objectives of this course are to present techniques and methodologies of software engineering: requirements elicitation, writing requirements specifications, structured and object requirements analysis, structured and object oriented design concepts, quality assurance and testing throughout the software lifecycle. The semester project will provide students with the opportunity to work in teams to gather and

analyze requirements, and write specifications for a realistic software project.

Expected Learning Outcomes

1. Acquire knowledge of the software process, life cycle models, and process improvement techniques and standards
2. Be able to apply various requirement elicitation techniques
3. Be able to write and validate requirements specifications
4. Develop skills to communicate and work effectively as a team
5. Be able to perform structured and object oriented analysis.
6. Acquire knowledge of structured and object oriented design.
7. Learn various techniques of execution and non-execution based testing, and be able to apply non-execution based testing techniques to the validation and verification of requirements.

Academic Dishonesty: All work, except for the group project, is to be done on an INDIVIDUAL basis. Evidence to the contrary will be regarded as academic dishonesty and will be dealt with swiftly and decisively. The integrity of the classes offered by any academic institution solidifies the foundation of its mission and cannot be sacrificed to expediency, ignorance, or blatant fraud. Therefore, I will enforce rigorous standards of academic integrity in all aspects and assignments of this course. For the detailed policy of West Virginia University regarding the definitions of acts considered to fall under academic dishonesty and possible ensuing sanctions, please see the Student Conduct Code at <http://www.arc.wvu.edu/admissions/integrity.html>. Should you have any questions about possibly improper research citations or references, or any other activity that may be interpreted as an attempt at academic dishonesty, please see me before the assignment is due to discuss the matter.

Social Justice: The West Virginia University community is committed to creating and fostering a positive learning and working environment based on open communication, mutual respect, and inclusion.

If you are a person with a disability and anticipate needing any type of accommodation in order to participate in this class, please advise me and make appropriate arrangements with the Office of Disability Services (293-6700). For more information on West Virginia University's Diversity, Equity, and Inclusion initiatives, please see <http://diversity.wvu.edu>.



CS 230

Introduction to Software Engineering

Spring 2015 -- Tentative Syllabus

Reading:

"No Silver Bullet - Essence and Accident in Software Engineering",
Brooks, F. P., Computer 20, 4 (April 1987), pp. 10-19.

Text: Kung, Object-Oriented Software Engineering
An Agile Unified Methodology

Topic

Text References

I. Software Engineering Principles software crisis software as a product project and team structures standards process life cycles measurement and metrics	Chapter 1-3
II. Reuirements Requirements Elicitation Definition, Specification, and Tools Modeling Classical Approach Object Oriented Approach	Chapter 4-9, 14
III. Quality Control Configuration Management	Chapter 18-19 Chapter 22
VI. Design	Chapter 10-12
VII. Validation and Verification	Chapter 20