

Course Syllabus for CSE 216: Software Engineering

Gang Tan

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Instructor and TA. Gang Tan, PL 329, 610-7583737, gtan@cse.lehigh.edu. Office hours: Mondays and Wednesdays 11-12.

TA and his/her office hours are TBA.

Course Website. A public website at <http://www.cse.lehigh.edu/~gtan/teaching/cse216s9/>. Course slides will be posted in Blackboard.

Textbook. The textbook is *Applying UML and Patterns: An Introduction to Object-Oriented Analysis and Design and Iterative Development: Third Edition* by Craig Larman, Prentice Hall 2005.

The following two books are optional (**these books are put on course reserve at the Fairchild-Martindale Library**):

- Design Patterns: Elements of Reusable Object-Oriented Software, by Erich Gamma, Richard Helm, Ralph Johnson, and John M. Vlissides, Addison-Wesley 1994.
- UML Distilled, Martin Fowler. Addison Wesley.

Major topics covered.

1. Software Development Processes
2. Requirements Engineering
3. Software Architecture and Patterns
4. Software Design (including Object-Oriented Analysis & Design, the Unified Modeling Language, Design Patterns, Functional Decomposition)
5. Project Management (including Project Planning, Cost Estimation, and others)

6. Software Quality(Reusability, Maintainability, etc.)
7. Software Testing
8. Use of CASE Tools
9. Implementation Techniques

Accommodations for Students with Disabilities. If you have a disability for which you are or may be requesting accommodations, please contact both your instructor and the Office of Academic Support Services, University Center 212 (610-758- 4152) as early as possible in the semester. You must have documentation on file in the Academic Support Services office before accommodations can be granted.

Attendance. Attendance is expected. Students who have legitimate reasons for absence have to inform the instructor before the fact. You are responsible for all material presented in class whether present or not.

Readings. When a chapter from the book is assigned, you are responsible for reading it and completing any assigned exercises.

Homework. You will periodically receive homework assignments that are to be turned in and will be graded. You may discuss the homework with other students in the class, but you must do your own work; you may not copy someone else's solution. Homework will be of two types, written assignments and programming assignments.

Assignments and their due dates will be announced on the course website.

Late Homework. If you submit your homework within three days of the due date, we will deduct 20% of your score. Within a week, we will deduct 40%. We will not accept homework submissions after a week.

Quizzes. You will be given a few short quizzes at the beginning of class throughout the semester. The quizzes will typically be unannounced and will be on topics in previous couple of lectures and assigned reading material.

Class project. For the Class Project, you will work in groups. You will have a number of "deliverables" for the project. For each deliverable, you will turn in an individual report discussing the process your group used to produce the deliverable, who contributed what, and your assessment of how effective the process was. Detailed requirement and format of the class project will be announced later.

Exams. There will be a midterm exam and a final exam. Dates and location of the exams will be announced.

Missed Exams. Make-up for missed exams will only be granted on a case-by-case basis.

Grading. Homework 25%; Class project 25%; Quizzes 5%; Midterm 20%; Final exam 25%.

Academic Integrity. Academic integrity is crucial for the pursuit of knowledge. Please refer to Lehigh's policy of [academic integrity](#) for any confusion.

Feedback. The success of this course need a mutual communication between course staff and students. We welcome your feedback on anything related to the course, such as course material we covered, teaching techniques, and difficulties in finishing the homework and project. We need your input!