

CSE 4311. Object-Oriented Software Engineering

SPR 2009

General

Lectures: TuTh 11:00am — 12:20pm 229 NH
Instructor: David C. Kung, 332 NH, 817-272-three 627
Office Hours: 9:30am — 10:50am TuTh, or by appointment
Email: kung at uta dot edu, Fax: 817-272-3784
GTA: TBD
Office Hours: TBD

Course Objective in Catalog:

4311. OBJECT-ORIENTED SOFTWARE ENGINEERING (3-0) 3 hours credit. General classification and comparison of structured, object-oriented software development including analysis, design, programming, and testing. Team project. Prerequisites: CSE 3310 and CSE 3315.

Textbook

Craig Larman, “Applying UML and Patterns: An Introduction to Object-Oriented Analysis and Design and Iterative Development” (3rd Edition), Prentice Hall, 2005. (You can save money by using an older edition.)

About FTP

You will need to download lecture notes, homework, project descriptions, and project related materials, etc. from the ftp site.

You can ftp off-campus by installing VPN on your personal computer. After installing VPN, configuring and establishing connection it should work. Here is the link on how to install and configure a vpn client on personal computers:

http://www.uta.edu/oit/clientservices/network/vpn/pc/vpn_pc.html

Reference Books and Articles

For UML:

G. Booch, J. Rumbaugh and I. Jacobson, “The Unified Modeling Language User Guide,” 2nd Ed., Addison Wesley, 2007.

For Java:

Cay S. Horstmann and Gary Cornell, “Core Java 2, Volume 1: Fundamentals,” 6th Edition, Prentice Hall, 2002.

Tentative Schedule

See Table 1.

Workload

Date	Class Activity	Slides	Assignment (due date*)
3/10	Team presentation and demo		2nd increment (4/14)
3/12	Team presentation and demo		HW1 (3/31)
3/17	Spring Break		
3/19	Spring Break		
3/24	Object interaction modeling	SE07	
3/26	Object interaction modeling	SE08	sequence diagrams (4/02)
3/31	Controller Pattern	SE09	HW2 (4/21)
4/02	Expert Pattern	SE10	
4/07	Creator Pattern, Deriving Design Class Diagram	SE10-11	DCD (4/14)
4/14	Team presentation and demo		3rd increment (5/5)
4/16	Team presentation and demo		
4/21	Testing and deployment		
4/23	Object state modeling	SE12	
4/28	State Pattern	SE13	
4/30	reserved		
5/05	Team presentation and demo		
5/07	Final exam, Team presentation and demo		

HW1 to assess the “ability to identify, formulate, and solve engineering problems,” and HW2 to assess the “ability to design a system, component, or process to meet desired needs within realistic constraints such as economic, environmental, social, political, ethical, health and safety, manufacturability, and sustainability.”
 * Submissions are due before class on the due date. Late submissions are subjected to 10% penalty and additional 10% penalty for every 24 hours passing the deadline.

Table 1: Tentative schedule

- One individual project (i.e., project P1) of two to three increments: 45% equal weight.
- Two individual homework assignments 10% each.
- One final exam 25%. The final exam is 30 minutes, has 20 questions, each requires the student to circle the best answer, not just the correct answer, from 4 choices.
- Pop quizzes 10% (equal weight or up to 2% each, whichever is lower) which can take place any time during the class and on any class day.

Grade Distribution

Total Score	>= 85	>= 70	>= 60	>= 50	< 50
Grade	A	B	C	D	F

The grades are computed by a program according to your scores. If you get 84.95 then you will get a “B”, not an “A” even if the score is so close to 85.

General Grading Criteria

Project and homework solutions are evaluated according to the following criteria:

Level L5. 100-90 points. Proposed solution significantly exceeds expectation, the solution is well-organized and clearly formulated, needed assumptions are clearly stated.

Level L4. 89-80 points. Proposed solution is adequate and valid, the solution is organized and adequately described, assumptions are stated.

Level L3. 79-70 points. Proposed solution is somewhat adequate and valid, the solution is somewhat organized and partially described, important assumptions are stated.

Level L2. 69-60 points. Proposed solution is only marginally adequate or valid, the solution is poorly organized or difficult to understand, important assumptions are not stated.

Level L1. 59-0 points. Proposed solution is incorrect or far from adequate and valid, the solution is impossible to comprehend.

Project Grading Criteria

Assignment Rules

1. Late assignments will be accepted before the explanation of the homework assignment in class. Late assignment are subjected to 10% deduction and additional 10% deduction for every 24 hours passing the deadline. After the explanation, no assignment will be accepted. This rule will be consistently applied to every student in all cases, regardless whatever good reason you may have.
2. You are encouraged to discuss homework with your classmates but not allowed to copy the solutions from or share the solutions with anybody. If you violate this rule, then you will receive no credit for that assignment unless you can prove that you are not involved.
3. The GTA will do most of the grading. If you do not agree with the result, contact the GTA first. Please contact the instructor if you cannot reach a consensus. This would help the GTA improve her/his grading skill and avoid inconsistency due to improper interference of the instructor.
4. To be fair to the other students, no special assignment will be provided for any student to improve her/his grade.

Go Home Early Request

Requests for permission to go home before the final exam date will not be granted except for medical reasons and with a proof from a doctor.

Class Email Alias

I will broadcast important messages, homework assignments, project descriptions etc. to students of the class. The messages will be delivered to your omega account. If you do not receive such messages, please contact me immediately so that I can add you to the list. It is your responsibility to contact me when your omega account has changed.

Your Standing and Class Statistics

After each assignment or test has been graded, I will distribute to each of you your scores and grade up to that assignment or test. You will also receive class performance statistics. Timely

distribution of such information requires that the TA email me the scores in time. Please help me to remind the TA to email me such information.

Library Information

(817) 272-3000, ext. 4938; email lsmith@library.uta.edu

<http://www.uta.edu/library/research/rt-cse.html> for CSE research information.

Please fill the course info, read, sign and return this statement to the instructor. Thanks.

**Statement of Ethics
Student Confirmation**
(CSE_____, Spring [], Summer [], Fall [], Year of _____)

The following is an excerpt from the College of Engineering's statement on Ethics, Professionalism, and Conduct of Engineering Students. The notes are modifications appropriate for Computer Science and Engineering courses. Read the statement carefully, sign it, and return it to your instructor. A copy of the original policy is available for examination in the Computer Science and Engineering office. Additional copies of this statement can be obtained from your instructor or the Computer Science and Engineering office.

**Statement on Ethics, Professionalism, and Conduct of Engineering Students
College of Engineering, The University of Texas at Arlington**

The College cannot and will not tolerate any form of academic dishonesty by its students. This includes, but is not limited to 1) cheating on examination, 2) plagiarism, or 3) collusion.

Definitions:

A. Cheating on an examination includes:

1. Copying from another's paper, any means of communication with another during an examination, giving aid to or receiving aid from another during an examination;
2. Using any material during an examination that is unauthorized by the proctor;
3. Taking or attempting to take an examination for another student or allowing another student to take or attempt to take an examination for oneself.
4. Using, obtaining, or attempting to obtain by any means the whole or any part of an unadministered examination.

B. Plagiarism is the unacknowledged incorporation of another's work into work which the student offers for credit.

C. Collusion is the unauthorized collaboration of another in preparing work that a student offers for credit.

D. Other types of academic dishonesty include using other student's printouts from the ACS labs or students' disk, etc.

Notes:

1. The use of the source code of another person's program, even temporarily, is considered plagiarism.
2. Allowing another person to use your source code, even temporarily, is considered collusion.
3. In this class, the specific exceptions given below are not considered scholastically dishonest acts:
 - A. Discussion of the algorithm and general programming techniques used to solve a problem
 - B. Giving and receiving aid in debugging
 - C. Discussion and comparison of program output
4. The penalty assessed for cheating on a given assignment will be twice the weight of the assignment and will include notification of the proper authorities as stipulated in the UTA Handbook of Operating Procedures and on the web at <http://www2.uta.edu/discipline>
5. You may be entitled to know what information UT Arlington (UTA) collects concerning you. You may review and have UTA correct this information according to procedures set forth in UT System BPM #32. The law is found in sections 552.021, 552.023 and 559.004 of the Texas Government Code.

I have read and I understand the above statement.

Student's signature:_____

Student's name (printed):_____

Student's ID number:_____