CS 201 Introduction to Object Oriented Programming

Course Syllabus – Summer 2005

Course Instructor

Dr. Jeff Gray
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Teaching Assistants

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Course Session

Tuesday and Thursday 03:00 PM - 05:05 PM Room CH 430

Lab Sections

Lab V1	Saturday	08:00 AM – 11:00 AM	CH 145	Zhang/Wei F
Lab V3	Saturday	11:00 AM – 2:00 PM	CH 145	Zhang/Wei F

Course Homepage

TBA

Lab Homepage

TBA

Prerequisite

CS 101 Computing Fundamentals or equivalent and MA 106 Pre-Calculus Trigonometry

Description

Two hours per lecture. Three hours per laboratory.

Introductory problem solving and computer programming using object-oriented techniques. Theoretical and practical aspects of programming and problem solving. Algorithm development; data structures; abstract data types; recursion; numerical and symbolic computation; classes, inheritance, and polymorphism. Laboratory component in context of object-oriented programming language.

Objectives

1. To introduce principles and practice of software development using object oriented programming.
2. To develop the problem solving skills necessary to develop software solutions to problems.
3. To develop knowledge of the data and control structures available in the object oriented programming paradigm and their appropriate uses.

Textbook

Java Software Solutions: Foundations of Program Design, 3rd Edition by John Lewis and William Loftus, Addison-Wesley, 2004.
URL for Book Resources: http://jss.villanova.edu/

Grading Policy

Tests (2)	15% each
Homework	30% overall
Lab Exams (2)	10% each
Final Exam	20%

All tests, lab exams and final exam are mandatory. All summer travel should be scheduled around projected exam dates.

Late Submission

1. All assignments are due at the beginning of class on the due date. Any assignment turned in after this deadline is considered late. Late assignments will lose 10% for every 24-hour period, up to a maximum of 50% (weekends and holidays count as one 24-hour period).
2. All assignments must be turned in even if they are late. Failure to submit any assignments will result in a grade of 'F'.

Lab Policy

1. The lab class will start meeting on June 4, 2005.
2. Attendance is not mandatory for the lab but all students must attend the first lab session and are strongly encouraged to attend all the labs.
3. Students must attend the lab during lab exams. There will be NO make-up lab exams.
4. The laboratory instructor will provide the laboratory policy and procedures.
5. A separate web page with laboratory syllabus and example programs will be provided on the lab web page.

Class Conduct

1. Students are expected to conduct themselves in a professional manner.
2. Laptops will be allowed only for the purpose of the class.
3. During a lecture, students may not log into a machine and do work that is not directly related to the topic of the current lecture.
3. Students must turn their cell phones/pagers OFF during the class.

Class Attendance

1. Attendance is mandatory for the lecture portion of this course. If you know you will be absent for a legitimate reason, let the instructor know. If you are sick, bring a doctor's excuse or a written university excuse to resolve the absences. An absence has to be resolved as soon as possible - otherwise it will not be treated as an excused absence. Students will receive a penalty of two percentage points on the final grade for each unexcused absence beyond the third absence (excused or unexcused).
2. Students are encouraged to attend all laboratory classes even though attendance for the lab is not mandatory.
3. Students must attend the lab during lab exams.
4. Students auditing this course are expected to attend the lectures. Auditing students with more than three unexcused absences will receive a failing grade.
5. There will be NO make-ups for tests and exams. If you miss a test for a legitimate reason, your final exam grade will replace that test grade. If the absence is unexcused, the student will be assigned 0 for the test or exam. A student anticipating an excused absence from a test or final exam should make arrangements in advance to take the test/exam at another time.

Academic Honesty

Students who plagiarize a computer program (or parts of a program), get others to write a program (or parts of a program), or are found cheating on a quiz/exam, will be reported for academic dishonesty. Anyone who is caught cheating will receive a 0 on a given test or assignment. If a second offense occurs, the student will receive an F in the class. This includes both the provider of the information as well as the receiver of the information. Any student who violates the university's academic honesty policy will be reported for academic discipline. All university and department policies related to students are included here by implication.

Add/Drop Policy

1. A student can add the course through June 9, 2005.
2. A student can drop the course without paying full tuition by June 8, 2005.
3. A student can withdraw with a "W" by July 12, 2005.
4. For more details about add/drop policies check with Registration/Academic Records.

E-mail

Every student will be required to use his/her official email address (that is, *blazerid*@uab.edu). New students must login and configure their email addresses. For more details on obtaining a *blazerid* and configuring emailm please see: http://www.uab.edu/blazerid. All email communications will be made using this address. Additional instructions or announcements will be sent by e-mail, so check your mail often – at least twice a day (once in the morning and once at night). Also, check the course webpage for up-to-date information and announcements. The instructor will check email frequently; e-mail is often the best way to contact the instructor.

Tentative Schedule for Lectures
(Lab Schedule Separate)

Updated June 2, 2005

Date	Topics	Comments
June 2	Introduction	Jeff at Microsoft
June 7	Chapter 1 Computer Systems	
June 9 June 14	Chapter 2 Objects and Primitive Data	
June 16 June 21	Chapter 3 Program Structures	Assign Homework-1
June 23 June 28	Chapter 4 Writing Classes	
June 30	Test 1 (75 minutes) Chapter 4 Writing Classes (continued)	Chapters 1-4 (up to covered part) Jeff out of town
July 5 July 7	Chapter 5 Enhancing Classes	Assign Homework-2
July 12	Test 1 Review Chapter 6 Arrays	
July 14	Chapter 6 Arrays (continued)	Assign Homework-3
July 19	Test 2 (75 minutes) Chapter 7 Inheritance	Chapters 4-6 Jeff at Microsoft
July 21	Chapter 7 Inheritance (continued)	
July 26 July 28	Test 2 Review Chapter 8 Exceptions and I/O Streams Remaining topics (time permitting)	
Aug 2	Final exam (2 hours)	Chapters 1-8 (comprehensive)