# Boston University
## College of Arts and Sciences
Computer Science Department

**CS 108: Application Programming**, Fall Semester 2005
http://people.bu.edu/azs/academics/cs108

**Class Meetings**: Tue and Thu 9:30 am – 11:00 am @ MCS 148
**Lab Meetings**: Tue 11 am or 2 pm @ CS teaching lab (EMA 304)

**Aaron Stevens**, Instructor
Office: PSY 228B
Office hours: Tue 1-2 pm; Wed 4-6pm; Thu 11 am -12 pm; and by appointment.
Email: azs@bu.edu.  *Always include "CS108" in the subject.*

**Ching (Jessica) Chang**, Teaching Fellow
Office: MCS 269
Tutoring hours: Mon and Thurs 1-3pm @ *Undergrad CS lab*
Email: jching@cs.bu.edu  *Always include "CS108" in the subject*

## Course description
This course will introduce students to the software development lifecycle (specification, design/planning, implementation/coding, testing), and the major paradigms for software development. A major portion of the course will be dedicated to learning the basics of object-oriented programming in Java. The course will culminate with a software development team project, which will simulate the process used by a team of software development consultants.

*At the end of this course, students will be able to:*
- Identify and explain the majors aspects of an object-oriented computer program
- Analyze a business problem/situation and describe the process of building a computer program to solve the business problem.
- Implement a simple business application with a custom developed computer program.

## Learning Methodology
I believe that software development is something that can only be learned by doing. Therefore, the course will be assignment-focused (as opposed to topic focused). To prepare for each assignment, you are expected to read the assigned sections(s) from the textbook(s) or other source materials, and class discussion will cover the key concepts of the readings and provide examples.

## Books and Software
Required:        Anderson, Julie, and Herve J. Franceschi: *Java 5 Illuminated*, 2005.**

                 Course Pack for CS108, Prentice Hall Custom Publishing, 2005.**

Recommended:     Horstmann and Cornell: *Core Java 2, Volume I – Fundamentals (7th Edition)*, 2004**

                 Eckel, Bruce: *Thinking in Java,* 4$^{rd}$ Edition. Prentice Hall, 2005.
                 Available free on the web at www.mindview.net.

Eclipse IDE      We will be using the Eclipse Integrated Development Environment (IDE) and debugger
                 to write, compile, and test Java code. The software is free on the web: www.eclipse.org.
                 Visit the class webpage for downloading instructions.
*** Available at the bookstore, and on reserve at the Science and Engineering Library.*

## Additional Reference Sources

The Java API Specification is the MOST IMPORTANT REFERENCE that you will use while programming. It is available at http://java.sun.com/j2se/1.5.0/docs/api/index.html.

## Grading

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|---|---|
| Attendance and 2-minute quizzes* | 5% |
| Required labs | 5% |
| Homework Assignments (about 9 or 10) | 35% (lowest *one* hw score will be dropped)* |
| Scheduled Quizzes (6) | 20% (lowest *one* quiz score will be dropped) |
| Final Exam (written) | 20% |
| Team Project and Presentation | 15% |

These percentages are tentative and may be changed at my discretion at any time.

*****2-minute quizzes** are occasional, unannounced, single-question quizzes that will be given sporadically throughout the semester. Points will be awarded for attendance and answering the question correctly.*

## Policies and Miscellaneous

**Attendance and discussion/asking questions are expected** and will be reflected in your grade.
If you must be absent, please email me in advance to let me know you won't be in class, and to let me know what you will do to keep up with the assignments.

**Assignments are due on the date stated on the homework assignment (to be posted on web).**
- Assignments received within 0-24 hours of the deadline will be accepted with a 25% penalty.
- Assignments received within 24-48 hours of the deadline will be accepted with a 50% penalty.
- Assignments received more than 48 hours past the deadline will not be graded.

Plan your work accordingly, and work on all assignments as soon as they are given so you can ask questions in class and get assistance in the labs and tutoring hours.

**There will be no make-up quizzes or exams.** If you have to miss a quiz for a medical reason or other extreme circumstances, you must inform me in advance; it will count as your "lowest one quiz score to be dropped." If you miss more than 1 quiz, you will receive a 0 for each missed quiz.

**Plagiarism, collaboration, and collusion**
All assignments are independent work. You are encouraged to discuss the problem statements, and to seek and receive help with the Java programming language and Eclipse IDE or other debugging tools. However, you must write your own code and other deliverables. It is the student's responsibility to know and understand the provisions of the CAS Academic Conduct Code, copies of which are available in room CAS 105. I am required by Boston University and the College of Arts and Sciences to refer cases of academic misconduct to the Dean's Office.

**Withdrawing from the course**
If you feel that you want to drop or withdraw from the class, please come talk to me about it as early as possible; I want to help you succeed, but you need to ask for help.
The last day to drop a class (without a "W" grade) is **Friday, October 7, 2005**.
The last date to withdraw and receive a "W" grade is **Friday, October 28, 2005**.