



Boston University

College of Arts and Sciences

Computer Science Department

CS 111: Introduction to Computer Science, Fall Semester 2005

<http://people.bu.edu/azs/academics/cs111>

Section B1 Class Meetings: Tue and Thu 3:30 pm – 5:00 pm @ GCB 205

Lab Meetings: Wed 11 am or 3 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 "CS111" in the subject.*

Alexandra Stefan, Teaching Fellow

Office: MCS 178

Tutoring hours: **TBD**

Email: alexst@cs.bu.edu. *Always include "CS111" in the subject*

Course description

This course will be an introduction to computer science and object-oriented programming through the vehicle of programming in the Java language. The course will focus on the skill of programming, to be sure, but will also attempt to introduce the student to the discipline of computer science. It serves as a stand-alone, rigorous sample of computer science, suitable for math and science majors, and also as the first course in the CS concentration.

Our emphasis in teaching programming in this course centers on the following:

1. Using objects as building blocks for program development.
2. Developing elegant and efficient code from an abstract specification;
3. Literate programming (writing a program that can be read by a human as well as a machine);
4. Programming methodology, which involves
 - o Thinking about the best way to plan out the design using object-oriented design and appropriate features of Java;
 - o Methodical and efficient development of the implementation using step-wise refinement and incremental testing and debugging (using appropriate debugging tools);
 - o Being able to convince yourself of the correctness of the implementation by mathematical reasoning.

Books and Software

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

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

Eckel, Bruce: *Thinking in Java*, 4th 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.
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

Attendance and 2-minute quizzes*	5%
Required labs	5%
Homework Assignments (about 12)	40% (lowest <i>one</i> hw score will be dropped)*
Scheduled Quizzes (6)	20% (lowest <i>one</i> quiz score will be dropped)
Final Exam (written)	20%
Final Exam (lab component)	10%

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.*

** The last homework is required and will not be dropped under any circumstances.*

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**.