Syllabus

Handout 1
CSCI 134: Spring, 2008
1 February

Introduction to Computer Science

Instructors	Prof. Brent Heeringa	Prof. Stephen Freund
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Office Hours	Monday 8–10pm, Thursday 2–3	Monday and Wednesday, 2:30 – 4

TAs	David Moore, Katie Creel, William Jannen, Mohamed Musthag, Jeff Marsceill
TA Hours	will be posted on CS homepage
Lectures	MWF 9–9:50 or 10–10:50 in TCL 206
Labs	M 1–4 or 7–10, or T 1–4 in TCL 217a
Web Page	`http://www.cs.williams.edu/~cs134/`

Texts

We will be using the following text book, which available at the bookstore:

Bruce, Danyluk and Murtagh, *Java: An Eventful Approach*, Prentice-Hall, 2005.

Course Objectives

This course introduces fundamental ideas in computer science and builds skills in the design, implementation, and testing of computer programs. Students implement algorithms in the Java programming language with a strong focus on constructing correct, understandable, and efficient programs. Students explore the material through specific application areas. Topics covered include object-oriented programming, control structures, arrays, recursion, and event-driven programming. This course is appropriate for all students who want to create software and have little or no prior computing experience.

Course Work

There will be weekly lab programming assignments. All programs will be graded on design, documentation and style, correctness, and efficiency. Programs should be turned in electronically by the due date. We will go over how to submit work in lab.

Attendance in lab is mandatory. Repeated absence from lab will result in failure of the course.

To accomodate your busy schedules and unanticipated obstacles, you may use a maximum of three free late days during the course of the semester. A late day permits you to hand in an assignment up to 24 hours late, without penalty. Once those late days are exhausted, late homeworks will be penalized. Programs will not be accepted more than four days late.

There will also be a midterm exam and a final exam, as well as two larger Programming Projects. Homework exercises (non-programming assignments) will be assigned and collected in class periodically and there may be one or two in-class quizzes.

Grades will be determined roughly as follows:

Labs:	30%
Projects:	10%–15% each
Final exam:	20%
Midterm:	15%
Homework & other:	10%

Honor Code

Homework and lab assignments are to be the sole work of each student unless the assignment explicitly states otherwise. Students may discuss issues related to an assignment, provided that such discussions are cited in the material turned in. However, students may not collaborate on designing or writing code. Uncredited collaborations will be considered a violation of the honor code and will be handled appropriately. For a full description of the Computer Science Honor Code, please see `http://www.cs.williams.edu/resources/usage.pdf`. If in doubt of what is appropriate, do not hesitate to ask us.

Tentative Schedule

This will undoubtedly change as we begin to explore these topics.

Date	Mon	Wed	Fri
Feb 1			Introduction *Preface*
Feb 4–Feb 8	Graphics, Events *Chapter 1,2*	Variables, Numbers *Chapter 3*	Conditionals *Chapter 4*
Feb 11–Feb 15	Primitive Types *Chapter 5*	Classes *Chapter 6*	Winter Carnival
Feb 18–Feb 22	Classes *Chapter 7*	Declarations, Scope *Chapter 8*	Loops, Active Objects *Chapter 9*
Feb 25–Feb 29	Active Objects	Images	Interfaces *Chapter 10*
Mar 3–Mar 7	GUIs *Chapter 11*	GUIs	GUIs
Mar 10–Mar 14	Recursion *Chapter 12*	Recursion	Recursion
Mar 17–Mar 21	Spring Break	Spring Break	Spring Break
Mar 24–Mar 28	Spring Break	Spring Break	Spring Break
Mar 31–Apr 4	For Loops *Chapter 13*	Arrays *Chapter 14*	Arrays
Apr 7–Apr 11	Arrays	2D Arrays *Chapter 15*	Collections
Apr 14–Apr 18	Inheritance *Chapter 17*	Strings *Chapter 16*	Strings
Apr 21–Apr 25	Exceptions *Chapter 18*	Streams *Chapter 19*	Networks
Apr 28–May 2	Networks	OOP Design *Chapter 21*	Searching *Chapter 20*
May 5–May 9	Sorting	Sorting	Wrap Up

The midterm is tentatively scheduled for April 3.