

Syllabus

Handout 1
CSCI 134: Fall, 2010
10 September

Introduction to Computer Science

Instructor Prof. Stephen Freund
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Office Hours Wednesday and Thursday, 2:30 – 4:00

TA Hours will be posted on web page
Lectures MWF 9–9:50 or 10–10:50 in TCL 206
Labs M or T 1:00–4:00 in TCL 217a
Web Page <http://www.cs.williams.edu/~cs134/>

Texts

We will use 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) may 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
Midterm:	15%
Final exam:	20%
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
Sep 10			Introduction <i>Preface</i>
Sep 13–Sep 17	Graphics, Events <i>Chapter 1,2</i>	Variables, Numbers <i>Chapter 3</i>	Conditionals <i>Chapter 4</i>
Sep 20–Sep 24	Primitive Types <i>Chapter 5</i>	Classes <i>Chapter 6</i>	Classes <i>Chapter 7</i>
Sep 27–Oct 1	Declarations, Scope <i>Chapter 8</i>	Loops, Active Objects <i>Chapter 9</i>	Mountain Day?
Oct 4–Oct 8	Active Objects	Images	Interfaces <i>Chapter 10</i>
Oct 11–Oct 15	Reading Period	GUIs <i>Chapter 11</i>	GUIs
Oct 18–Oct 22	GUIs	Recursion <i>Chapter 12</i>	Recursion
Oct 25–Oct 29	Recursion	For Loops <i>Chapter 13</i>	Arrays <i>Chapter 14</i>
Nov 1–Nov 5	Arrays	Arrays	2D Arrays <i>Chapter 15</i>
Nov 8–Nov 12	Collections	Inheritance <i>Chapter 17</i>	Strings <i>Chapter 16</i>
Nov 15–Nov 19	Strings	Exceptions <i>Chapter 18</i>	Streams <i>Chapter 19</i>
Nov 22–Nov 26	Networks	Thanksgiving	Thanksgiving
Nov 29–Dec 3	Networks	OOP Design <i>Chapter 21</i>	Searching <i>Chapter 20</i>
Dec 6–Dec 10	Sorting	Sorting	Wrap Up

The midterm is tentatively scheduled for Thursday, Oct 28, at 7:30pm.