

CS151 – COMPUTER SCIENCE I

Spring Semester 2004

Dr. Bradley Kjell

Lecture: Tue/Thu 6:45PM—8:35PM

Copernicus 24404

This is a first course in computer science for students in computer science and other scientific disciplines. It follows the recommendations of the *Association for Computing Machinery*, the professional organization for computer science. It emphasizes the analysis of problems, the design of algorithms for solving problems, and the use of the computer programming language Java. Additional topics include computer architecture, operating systems, graphics, and professional issues. These topics are the basis for advanced study and careers in computer science.

Prerequisites: Math 119 or MATH 121 or placement test. This is a bare minimum; additional mathematics would be helpful. No programming background is assumed, although students are expected to have an elementary knowledge of computer use.

Office Hours: (provisional) MS 205 Tuesday and Thursday 4:30pm–5:00pm; Monday and Wednesday 5:30pm–6:30pm. Phone: 832-2717.

Microcomputer Laboratory: Students must obtain a computer account on the computers in the Marcus White Microcomputer Laboratory. Students who want an introduction to basic computer use may take a hands-on workshop in the training classrooms in Marcus White during the first two weeks of classes. See the Marcus White Microcomputer Laboratory for further details.

All programming assignments can be completed in the Microcomputer Laboratory or at home if you have a computer and appropriate software. The class will be taught as if the Java system you are using is the *Java Development Kit* version 1.4, available at the Sun Microsystems web site for free downloading. The textbook comes with a CD that enables you to load this onto your home computer.

Required Texts: John Lewis and William Loftus, *Java Software Solutions*, 3rd ed., Addison-Wesley, 2004. This is a standard text for a first course in computer science. The first eight chapters will be covered, with additional topics covered if time allows. Students should expect to study this text thoroughly and to work through many of the programming examples on their own.

Interactive Tutorial: In addition to the text, students are expected to study the material for the course available on the Web at: <http://chortle.ccsu.edu>. Quizzes will often be based on this material.

WebCT: The course is supported by WebCT. Go to <http://www.ccsu.edu> and look for CentralPipeline. Click on this, and login using your university computer account and

password. Then go to “My Courses” and select CS 151. Some of the quizzes for this course may be done through WebCT.

Tests: There quizzes (short tests), two midterms (full hour tests), and a final. Midterms will be announced at least a week in advance.

Assignments: There will be written assignments and programming projects. All assignments are due at the start of class on the specified due date. Late assignments will sometimes be accepted, but a considerable penalty will be imposed. Start early on programming projects even if you think it will take you only a short time to complete.

Programs: There will be about eight programs of varying difficulty. All assignments will require you to turn in an adequately documented and nicely printed listing of the source program. Some assignments will require you to turn in examples of the program’s output. You may sometimes be required to submit an electronic version of the source code. A student who wishes a successful career in computer science will write and study more programs than these few assigned programs. At university level in a technical discipline, merely completing the assignments is *not* sufficient to learn what is expected.

Academic Honesty: All programs and written assignments are to be the individual effort of the student submitting the work for grading. See the section “Policy on Academic Honesty” in the CCSU *Student Handbook*.

Attendance and Workload: Regular attendance is expected. Missing just one lecture can be critical. In general, there will be no makeup for missed tests. The workload in this course may be surprising. Students are expected to spend about 12 hours per week studying and working on assignments.

Final Examination: Thu May 20, 2004 6:45PM—8:35PM in the usual classroom

Final Course Grade: The final grade will be based on (approximately) tests and quizzes 40%, programs 40%, written work 15%, attendance and class participation, 5%. To determine about what your grade is “so far,” add up all the points you have received, calculate the percent of the maximum possible points, then look at this chart:

Approximate Grading Scale					
95-100	A	80-83	B-	67-69	D+
90-94	A-	77-79	C+	64-66	D
87-89	B+	74-76	C	60-63	D-
84-86	B	70-73	C-	0-59	sad news