9-2002

CS 331.01: Data Structures in JAVA

Jesse Johnson
University of Montana - Missoula

Computer Science 331
Data Structures in JAVA
Fall 2002 Syllabus

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Professor

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Teaching Assistant

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Office Hours:	MWF 9–10:00

Online Assistance

You will find copies of the syllabus, lecture notes, homework assignments, exams, an archive of mailing list messages, text book errata, solutions to homeworks and exams, and other helpful materials online. It is strongly recommended that you use these resources.

A class mailing list has been set up to allow students to discuss issues that arise in the course. It should be the first place people post questions about material when they get stuck. The instructor and TA will monitor this list and attempt to address issues that arise, but the intention is that students answer each others questions.

Course web site: http://cs.umt.edu/CS/COURSES/CS331/

Mailing list email: cs331@mcs15123.umt.edu

To subscribe to the class mailing list, simply go to the above web site and follow the links and instructions.

Textbook

Data Structures in JAVA Walls and Mirrors
Frank M. Carrano and Janet J. Prichard
2001 Addison Wesley Longman, Inc.
ISBN 0-201-70220-7

Prerequisite

- Computer Science 132, Fundamentals of Computer Science II
- Math 225, Discrete Mathematics

Course Objectives

In this course, the instructors are trying to achieve the following:

- Impart to students a solid understanding of data structures, data abstraction, and algorithms that utilize abstract data structures.
- To give students a functional ability to create working JAVA programs from the formal specification of abstract data types.
- Introduction to recursion and algorithmic analysis.
- Improve the students' strengths as software engineers.
- Strengthen the students' programming skills, particularly in the JAVA programming language.
- Prepare the students for upper level computer science course work.

Meeting Times/Place

Times: Tuesday, Thursday 15:40-17:00
Place: Social Science 352

Final Exam Time and Place

15:20– December 17, 2002 Place TBA

Grading Policy

Grades of A-F will be assigned based on the following scale.

A	90-100
B	80-89
C	70-79
D	60-69
F	0-59

Grades will be based upon the following forms of evaluation.

Exercise	Number	Percentage of final grade
Homework	6	20%
Programming Assignments	5	40%
Midterm Exams	2	30 %
Comprehensive Final Exam	1	10%

I reserve the right to make changes to the grading policy that will be favorable to students grades.

Students taking the course pass/no pass are required to earn a grade of C or better in order to pass.

Attendance Policy

Attending lectures is not required, but highly recommended. I am placing high hopes in having productive office hours in Social Science Room 419 (the fish bowl). I will be having office hours there and hope to interact with you in meaningful ways about your homework and programming assignments. The TA will be doing the same.

Late Assignments

Other than in in exceptional circumstances, such as family emergencies *late homework will not be accepted.*

Academic Integrity

While I encourage iteration between students on issues such as homework and programming assignments, each student is expected to turn in his or her own *unique* assignment. Students turning in identical programs or assignments will be assumed to be cheating and dealt with according to the student conduct code. Cheating is unacceptable and will be treated with the utmost seriousness.

Students are to uphold a level of conduct becoming of adults. The use of profanity and abusive speech is not permitted under the student conduct code, and will not be tolerated in this course.

Schedule

The following is a tentative schedule for the course. I reserve the right to modify the schedule to reflect the way the course is going with respect to completion of assignments, performance on exams, etc.

Week	Classes Dates	Topics	Chapter(s)	Notes
1	September 3,5	Introduction, Review of Java	1	9/05 Late reg. fee begins
2	September 10,12	Programming, Recursion	1,2	
3	September 17,19	Data Abstraction	3	I will be gone the 18-21st
4	September 24,26	Data Abstraction, Linked Lists	3,4	09/23 last day to drop/add without W. on transcript.
5	October 1,3	Linked Lists	4	
6	October 8,10	Linked Lists, Recursion	4,5	Exam I
7	October 15,17	Recursion	5	I will be gone the 13-16th. 10/14 last drop/add no refund. Last day change grade option.
8	October 22,24	Stacks	6	
9	October 29,31	Stacks, Queues	6,7	
10	November 5,7	Queues, Class Relationships	7,8	
11	November 12,14	Class Relationships	8	
12	November 19,21	Efficiency and Sorting	9	Exam II
13	November 26	Efficiency and Sorting	9	Thanksgiving Break
14	December 3,5	Trees	10	12/6 last day to withdraw.
15	December 10,11	Selected Topics		
16	December 16–20			Final exam week.

Disabilities

Students with disabilities are encouraged to meet with me to discuss any accommodations they require.

Other Issues

- Turn off your cellphone, or set it to vibrate in class. Take the call outside the classroom.
- Do not talk in the classroom during lecture. Take it outside.
- Remember, your crisis is not my crisis.
- I expect that this course will be challenging for many of you. I am not interested in weeding people out, but it often works out that way. I can not give you a recipe for success in this course other than to work hard and use the resources available to you.
- I sincerely hope that you take some pleasure in what you are doing. You ought to be studying Computer Science because *you like it*.