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Syllabi

Course Syllabi

Fall 9-1-2000

CS 331.01: Data Structures

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Computer Science 331 - Autumn 2000

Data Structures

Prerequisites

CS 132 - Fundamentals of Computer Science II
(corequisite) Math 225 - Discrete Mathematics

Outcomes of the Course

It is expected that students will finish the course with the following skills/knowledge:

Full understanding and appreciation of concepts in data and procedural abstraction.
Thorough familiarity with commonly-used data structures and their associated algorithms, and use of abstract data types in solving a broad range of problems.
Increased maturity and skills in mapping problems to well-designed, well-implemented computer programs. Though Java programming will be the only expected language prerequisite for the course, emphasis will be placed on language-independence of data structures and algorithms for the purpose of designing problem solutions.
Exposure to concepts in algorithm analysis.

Instructor Information

Don Morton
Social Sciences 416
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Office Hours

See *http://www.cs.umt.edu/u/morton/office_sched.html* for current information.

Class Meeting Times/Place

1540 - 1700 TuTh
Chemistry-Pharmacy 109

Attendance Policy

Class attendance is not a factor in determining grades. When a class is missed, it is the STUDENT'S responsibility to obtain any notes, assignments, etc. from classmates.

Required Text

Data Structures in Java, by Thomas A. Standish.

Grade Evaluation

5 programming assignments - 25%

Absolutely NO programming assignments will be accepted after the stated deadlines.
Lowest programme assignment grade is dropped. Students are still expected to understand any material related to the programme.
Programme assignments which do not compile will not be graded.
In general, no extensions of programme deadlines - plan ahead and anticipate system outages, etc.
Your best bet is to plan on having your assignment completed several days before the actual due date. If you find yourself at the deadline without a completed programme, your best bet is to turn in *something* that compiles, even if it doesn't work as specified.

5 graded homework assignments - 10%.

Absolutely NO homework assignments accepted after stated deadline.
Lowest homework assignment grade is dropped. Students are still expected to understand any material related to the homework.

Two exams - 40% (15% "low" exam, 25% "high" exam)

Must notify instructor *BEFORE* the exam to schedule a makeup.
Exam 1 - Thursday, 5 October, in class.
Exam 2 - Thursday, 9 November, in class.
Exam with lowest score will be weighted 15%, other exam weighted 25%.

Comprehensive final exam - 25%

1520, Monday, 18 December

Grading Scale

Grade	Average
A	90 or greater
B	80-89
C	70-79
D	60-69
F	less than 60

Tentative Course Topics (not necessarily in this order)

- Overview
- Object-Oriented Programming
- Linked Data Representation
- Recursion
- Queues
- Stacks
- Trees
- Graphs
- Hashing and Tables
- Sorting
- Algorithm Analysis

Page maintained by Don Morton

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