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# CMSC 341

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Fall 2008

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# Course Website

<http://www.cs.umbc.edu/courses/undergraduate/341/fall08/>

- Instructors office hours
- TA names and office hours
  - TAs grade projects
- Syllabus
- Class schedule including project and exam dates
- Grading
- Lecture slides
- Projects
- Practice Exercises

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# Student Honor Code

## UMBC Student Honor Code

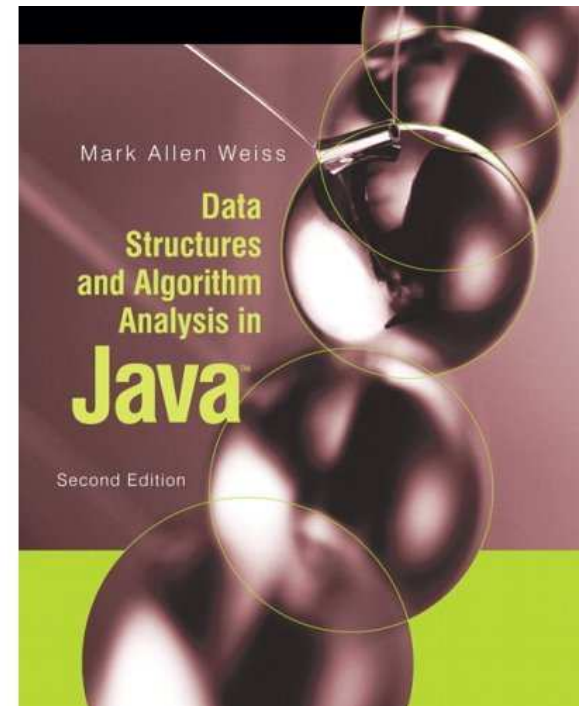
By enrolling in this course, each student assumes the responsibilities of an active participant in UMBC's scholarly community in which everyone's academic work and behavior are held to the highest standards of honesty. Cheating, fabrication, plagiarism, and helping others to commit these acts are all forms of academic dishonesty, and they are wrong. Academic misconduct could result in disciplinary action that may include, ***but is not limited to***, suspension or dismissal. To read the full Student Academic Conduct Policy, consult the UMBC Student Handbook, the Faculty Handbook, or the UMBC Policies section of the UMBC Directory.

<http://www.umbc.edu/provost/integrity/index.html>

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# Textbook

- Data Structures and Algorithm Analysis in Java, 2/E
- **Mark Allen Weiss**, *Florida International University*
  
- ISBN: 0-321-37013-9
- Publisher: Addison-Wesley
- Copyright: 2007



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# Prerequisites

- CMSC 202 – Computer Science II
  - Java (formerly in C++)
    - Class Design
    - Inheritance
    - Polymorphism
    - Generics/Templates
    - Operator overloading (C++)
    - Pointers and dynamic memory management (C++)
- CMSC 203 - Discrete Structures
  - Proof by induction
  - Permutations and combinations

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# Data Structure

- What is a “data structure”?
  
  
  
  
  
  
  
  
  
  
- How are they implemented?

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# Abstract Data Type

- What is an ADT?

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# Why Java?

- Java contains a Collections framework that consists of system classes that emulate many of the data structures that you will learn about in this course.
- Easier to program in Java than C++
- Popular industry standard
- More similar to C# than C++
- Platform Independent
- Easy to do GUI Programming