SYLLABUS - CSC240

Computer Science III
Spring 2007

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Required Text: Tony Gaddis, Starting Out with Java 5: From Control Structures to Objects, ISBN 1-57676-171-1

Lectures, Attendance, Cheating: During class we will focus our attention primarily on programs (including some Professor Grump programs) that introduce the Java concepts for this course. The textbook is an excellent reference for background information on these concepts. Some classes will be devoted to “classercises” that will help you to prepare for the exams. Regular attendance is a requirement for this course. Cheating on submitted assignments or exams will not be tolerated. I consider cheating a serious offense, especially since the Computer Science major aims to educate students to become professionals in a domain where unethical and unprofessional behavior can lead to economic disaster and even death for innocent victims. (For example, you might want to look into the Therac-25 incident, in which a programmer caused the death of three cancer patients.) If you are a Computer Science major and the only way you can get through our major is through cheating, then CHANGE YOUR MAJOR. Find a profession that you will find truly rewarding.

Assumptions: This course assumes that you had CSC142 or an equivalent course in Java. We will spend the first week or so reviewing the important concepts from that course.

Submitting assignments: I do not care which development environment you use in this course. The JGrasp environment is really cool and that is what I will be using. What is required is that you submit projects that will compile and run under Java 5.
Late submission of assignments: There is a penalty for late submission of
homeworks, although late submissions are accepted up until a point. The late
penalty increases as time lapses, so the earlier you hand in a late project the
ter.

Grading:
  Hourly exams: 50% (25% each)
  Final exam: 27%
  Four projects: 23% (4 + 8 + 7 + 4)

Very Tentative Syllabus:

Weeks 1-2 of the course:
  Review of CSC142.
  Text processing (Chapter 10)
  The first assignment relates to this review material.

Weeks 3-4:
  Chapter 11. Inheritance
  First hourly exam relates to the review material, text processing
  and basic inheritance stuff.

Weeks 5-8:
  Chapter 11: Polymorphism and Heterogeneous Collections
  The second assignment relates to this material.

Weeks 9-10:
  Generics (ArrayLists are covered in Chapter 8).
  The third assignment relates to generics
  Second hourly exam relates to more advanced inheritance
  concepts (like polymorphism, abstract classes and
  interfaces) and generics.

Weeks 11-13:
  Chapter 12: Exceptions
  --- Intro to linked list data structure
  The fourth assignment relates to this material.

Weeks 14-15:
  Chapter 12: More about stream i/o (especially random access files
  and serialization.
  Final exam relates to exceptions, linked lists, and random access files.