

COMP 2210**Fundamentals of Computing II****Spring 2011**<http://www.auburn.edu/~hendrtd/courses/comp2210>**Course****Staff****Instructor**

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 Office Hours: MWF 10:00am-11:00am or by appointment

Teaching Assistants

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Course**Meetings**

Lecture Shelby 1103
 11:00am – 11:50am MWF

Labs Shelby 2122
 Sec 001 11:00am-12:15pm TR
 Sec 002 12:30pm-1:45pm TR
 Sec 003 2:00pm-3:15pm TR
 Sec 004 3:30pm-4:45pm TR

Course**Materials****Textbook**

Venugopal, S. (2006). *Data Structures Outside-In with Java* (1st ed.). Prentice Hall. ISBN 0-13-198619-8.

Engineering Network Account

Each student is required to have an account on the Engineering Network. Your programs must compile and run on this network. Go to 103 L-Building for assistance with your account.

University IT Account

You are responsible for checking your TigerMail email as well as the course web site on a regular basis. Per University policy, email sent to your TigerMail account is considered official University communication and you are held responsible for it. See the following URL for more details on this policy and more information about student email: http://www.auburn.edu/oit/account_info/tigermail/.

Development Environment

jGRASP (1.8.8_05) <http://jgrasp.org>
 Java 2 JDK 6.0 (6u15) <http://java.sun.com/javase>

Course**Content**

COMP 2210 is designed to introduce fundamental data structures, their associated algorithms, and applications in which they are commonly used. An object-oriented approach to problem solving and program design will be emphasized in the lecture and reinforced in the lab.

Specific course objectives are: (1) Be able to design, implement, and apply data structures based on specifications of abstract data types. (2) Be able to apply concepts and techniques from object-oriented programming. (3) Be able to perform fundamental testing and debugging techniques. (4) Be able to perform fundamental maintenance activities. (5) Be able to perform fundamental time and space analysis on algorithms.

Course**Outline**

The topical outline of the course is given in the following table. The online course calendar has a day-by-day schedule, and any variation from the outline below will be reflected in the course calendar. All students are held responsible for the contents of the online course calendar.

Topic	Reading from Text
Java review; OOD; Searching	Ch. 1, 2
Algorithm Analysis	Ch. 3
Sorting and Searching	Ch. 3, 13
A Simple Collection	Ch. 1, 2, Notes
Linked Structures	Notes
Exam 1	
Lists	Ch. 4, 5
Stacks and Queues	Ch. 6, 7
Recursion	Ch. 8
Exam 2	
Trees	Ch. 9
Binary Search Trees	Ch. 10
Multi-way Search Trees	Notes
Exam 3	
Heaps	Ch. 11
Hashing	Ch. 12
Graphs	Ch. 14, 15
Exam 4	
Final Exam	
Tuesday May 3, 2011 12:00pm – 2:30pm	

Course**Grading**

Your grade for the course will be determined by your performance on a sequence of exams, graded in-lab activities, and programming assignments. There will be five exams

(Exam 1, Exam 2, Exam 3, Exam 4, Final), each worth 100 points. The final exam is comprehensive, covering all the material in the course.

There will be a sequence of graded in-lab activities, each worth 100 points. In-lab activities have a 75-minute time limit and can only be completed during the lab period for which they are scheduled. University approved excuses will be required to make up any in-lab activity.

There will be a sequence of programming assignments, each worth 100 points. No late submissions can be accepted.

Your *numeric score* for the course will be determined according to the following formula where EXAMS is the sum of all your five four exam scores, GLA is the arithmetic average of the individual graded in-lab activity scores, and PA is the arithmetic average of the individual programming assignment scores.

$$\text{numeric score} = \text{EXAMS} * 0.13 + 0.1625 + \text{GLA} * 0.15 + \text{PA} * 0.20$$

Letter grades will be assigned per the numeric score and the standard 10-point scale (90-100 = A, 80-89 = B, etc.).

Course Policies

Cheating

You will be held responsible for adherence to the Academic Honesty policies described in the *Tiger Cub*.

Make-Up Work

Work missed during the semester will be assigned a grade of zero points. Make up work will be given only for valid University excuses with appropriate written verification (see the *Tiger Cub*). It is always your responsibility to initiate arrangements to make up missed work, and these arrangements must be initiated within one week of the original missed due date or within one week of your return to campus (documentation required).

Attendance

It is extremely important for you to attend all class meetings. Information given during class meetings is vital to earning a passing grade. You are responsible for all material presented in lecture and in lab whether you are present or not.

Graded materials will be returned only in person, so you will have to come by the instructor's office to pick up graded items that were returned during your absence. If you are excessively late to an exam, the instructor reserves the right to count you absent from the exam and give you the opportunity to take a make-up.

Special Accommodations

Students who need accommodations are asked to arrange a meeting during office hours the first week of classes, or as

soon as possible if accommodations are needed immediately. If you have a conflict with my office hours, an alternate time can be arranged. To set up this meeting, please contact me by e-mail. Bring a copy of your Accommodation Memo and an Instructor Verification Form to the meeting. If you do not have an Accommodation Memo but need accommodations, make an appointment with The Program for Students with Disabilities, 1244 Haley Center, 844-2096 (V/TT).

Course Website

All students are held responsible for the complete contents of the course website, including announcements and calendar entries. Some course announcements and events may be posted only to the course website. The URL for the course website is listed at the top of the first page of this syllabus.

Grading Assignments

Late submissions of any assignment will not be accepted and will result in a grade of zero points. Although partial credit will be given on assignments, source code that does not compile is worth zero points.

Graded Material

You are required to keep on file all graded materials in case there is any question about your course grade.

Grade Appeals

The instructor and the TAs will consider requests for re-grading in the event of an error. Appeals for re-grading a graded item (exams, in-lab activities, or programming assignments) must be made in writing to the instructor no later than one week after the item is returned to you. In the appeal, you must describe (a) exactly what portion you wish to be re-graded and (b) the reasons you are requesting the re-grading in a clear, concise manner. Only e-mail appeals will be accepted. Grades will be made available for viewing at various times during the semester. It is your responsibility to make sure that the recorded grades are accurate. With the exception of the final exam grade, you have one week from the posting of a grade or the return of a graded item, whichever is first, to dispute the grade. You will have less than 48 hours to dispute the final exam grade before official letter grades are recorded in Banner.

Electronic Devices

Devices such as computers and mobile phones should be turned off or set to silent mode before a class or lab begins, and should remain in this setting until the class or lab is over. It is extremely disruptive for phones to ring during class. No communication or computing device, with the exception of a standard calculator, will be allowed during exams. You may use your laptop during class, but only for work related to the course.