

**SYLLABUS - COP 3540\_10024**  
**DATA STRUCTURES WITH OOP**  
**Spring 2011**

**Instructor:** Dr. Bob Roggio,  
**Office Hours:** 11-12pm; 1-2pm; 4- 4:30pm Mondays and Wednesdays.  
Other times by appointment  
**Office:** Building 15 Room 3220  
**Office phone:** 620-2985 – far better to reach me via email.  
**Class Time:** Monday and Wednesday 2 – 3:40pm  
**Class Location:** 15/1205  
**Prerequisites:** COP 2551, Intro to Object-Oriented Programming with Java  
**Textbook titles:**  
LaFore, Robert, Data Structures and Algorithms in Java, 2<sup>nd</sup>  
Edition, SAMS Publishing, 2003, ISBN:0-672-32543-9

We will use Netbeans 6.8 / 6.9 co-bundled with the latest version of Java. See my web page for the procedure.

**Important Dates:**

See <http://www.unf.edu/registrar> for the catalog, course schedules, final exam schedule, add / drop days, last dayus to drop with partial / no refund, and more.

Exam Schedule in general is: (<http://www.unf.edu/registrar/finals.html>)  
Exams must be held during your exam period, which may not be your normal class time.

Before you withdraw from this (or any) class, be sure to read the following policy:  
<http://www.unf.edu/cocse/cis/CIShtml/CIScourseRepeat.html>

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**Course Objectives**

To become skilled at program structuring and development using highly cohesive, loosely coupled, modules.

To learn alternate approaches to data structures and evaluate their efficiency

To introduce Abstract Data Types (ADTs) and really learn about OO Design and Object Oriented Programming (OOP)

### **General Course Content:**

The reading assignments will be as far as we can go: Chapters 1 – 12 in the Data Structures & Algorithms in Java text.

My web page: <http://www.unf.edu/~broggio>

### **Testing and Grading:**

Three Exams - each 25% of final grade\*

Programming Projects – 25%

Make-up tests will **not** be given

unless an **extreme documented emergency**

arises.

### **Programming Projects:**

There will be approximately five projects which will be of varying complexity during this semester. Every attempt has been made to have a complete description of each requirement. However, if I have not been clear or if you have any question, please do not hesitate to ask. We will also discuss the projects during class time as may be required.

Do not wait until two or three days before the assignment is due to study the requirements to see if you understand them. You are too late. Be smart and 'front end' these assignments.

### **Grade Guidelines:**

0. Every one wants an A. Frankly, I would be pleased to record A grades for everyone. Unfortunately this rarely happens. But here is the simple key to your 'earning' an A – and, I might add, more importantly - learning the material that is essential to your success as a graduate and professional in this field.

#### **1. DON'T MISS CLASS!**

If you are one who misses classes to study for other courses or for other reasons, these are NOT classes that you want to miss. There is simply too much material passed on. If you must miss class, then do NOT assume that the slides are substitutes for the lecture. They are not.

I must confess to you that I detest unexcused absenteeism and have never been able to fully understand the many weak arguments I have

heard through the years. While you do pay for the course, be smart and hear / learn all you can.

My experiences indicate that missing a number of classes results in a full earned grade reduction. In the Fall 2006, I cannot recall the number of points that I made in class or sent out via email that later appeared on a short quiz or a major exam that were missed by those who were absent. There are a number of important points that are discussed in class or mentioned in class that, if unheard, cost points in exams. I will at times send you **solutions** to problems via email. These too were later found in exams / quizzes only to be often missed by those who fail to attend class and/or fail to regularly check email. Enough said.

2. **BE SMART: DOWNLOAD SLIDES AND BRING TO CLASS OR BRING YOUR NOTEBOOK COMPUTER AND ANNOTATE SLIDES AS I GO THROUGH THEM.**

My lectures will come from these slides (my handwriting is atrocious!), which are updated every semester with the latest information. They are not sufficient in themselves as sources of study. Bring your copies to class and mark on them as I discuss the materials in class. These slides are on my web page for you so you don't have to write volumes of notes during lecture and you can listen. Take advantage of this opportunity.

While my notes from the last time I taught this course are currently posted, I almost always modify them prior to class. Normally the day before class or early the morning of class they become fixed. This is the best time to download, if you plan to download.

3. **DON'T MISS THE READING ASSIGNMENTS! BE READY FOR CLASS.**

You will be selling yourself short and not get the full impact of the lectures and the broadening presented to you in the readings if you fail to do the readings. Many graduates cite that the data structures course was one of the most important classes they took.

4. **WORK SMARTER – NOT HARDER!**

'Front-end' everything. This means to jump on assignments once they are in scope. Don't put them off! **This is a recipe for failure for sure.** Allow time. While you will not necessarily know everything that needs to be done, this initial thinking will pay huge dividends in your development. Understand the requirements first; then do a preliminary class design. **Lastly** do the coding.