

COSC 350A: Data Structures  
Wofford College, Spring 2009

**Instructor:** Dr. Joseph D. Sloan, 216D Olin Building

**Email:** My email address is [sloanjd@wofford.edu](mailto:sloanjd@wofford.edu). I check this repeatedly throughout the day and as well as from home. Apart from coming by my office, this is the best way to contact me.

**Office Phone:** 597-4529 Be warned, I rarely check my voice mail.

**Office hours:** You are welcome to just drop by. I come in early and I'm generally here until early-afternoon. But I will make a particular effort to be here:

8:00-9:20 & 10:30-11:20 on Mondays, Wednesdays, and Fridays,  
9:30-11:00 on Tuesdays and Thursdays, and,  
By appointment.

**My Class Schedule:** These are times I am scheduled to be in class, so I will not be available:

* CS 350:	9:30-10:20 Monday, Wednesday and Friday	Olin 213
CS 235:	11:30-12:20 Monday, Wednesday and Friday	Olin 213
CS 482:	8:00-9:20 Tuesday and Thursday	Olin 218

I'll also be sitting in on a course so I will also not be available at these times:

BIOL 481:	1:00-1:50 Monday, Wednesday and Friday	RMSC 325
BIOL 481L:	2:30-5:40 Thursday	Olin 212

**Final Examination:** None

**COSC 350: Data Structures.** An introduction to the formal study of data structures, such as arrays, stacks, queues, lists, and trees, along with algorithm design and analysis of efficiency. Prerequisite: C or higher in Computer Science 235. (3/0/3) A. SHIFLET, SLOAN, SYKES—*Wofford College 2007-2009 Catalogue*.

**Course Goals and Objectives:** In general, you will:

- Expand your understanding of problem solving and program design
- Learn more about programming and programming languages, particularly Python
- Learn the basics of recursive programming
- Develop a greater understanding of how data is stored and manipulated
- Learn about searching and sorting algorithms
- Learn the fundamentals of analyzing computer algorithms for efficiency
- Learn to use common data structures including stacks, queues, lists, binary trees, and graphs

The class's instructional format will be lecture-discussion. Testing and programming assignments will be used to insure the class goals are met.

**Text and Supplies:** *Algorithms in C++ Parts 1–4, Third Edition*. Robert Sedgewick, ISBN: 0-201-35088-2, Addison-Wesley, Pearson Education, 1998. There may be additional handouts. Although you are unlikely to need one, a calculator may be used during testing subject to the following constraints—1. the memory of the calculator must be cleared at the start of the test, 2. no sharing of calculators is allowed, and, 3. manuals or directions for your calculator are not allowed. In practice, you will find relatively few uses for calculators in this course and can probably get by without one. Computers or PDAs may not be used during testing in this class. Nor are you permitted to use a cell phone during a test.

**Course Web Site:** There are two websites you may be interested in visiting. The course website <http://webs.wofford.edu/sloanjd/spring09/cosc350/index.htm>. This will be developed and updated as the semester progresses. You should check this regularly for schedule information, etc. The Computer Science Department's website also has links to files you may find helpful: [http://dept.wofford.edu/computer\\_science/](http://dept.wofford.edu/computer_science/).

**Grading:** There will be three quizzes scheduled during the semester that will collectively count 60% of your grade. The remaining 40% of your grade will come from routine homework (20%) and programming assignments (20%). Some assignments may count more than others but this will be announced in advance. There will be no final examination in this course.

Any points awarded toward an incorrect answer as partial credit are totally at my discretion. Returning the Preliminary Student Survey is a requirement of the course.

**Grade scale:** At a minimum, grades will be assigned according to the following scale:

Final Course Average	Letter Grade
93–100	A
90–92	A <sup>-</sup>
87–89	B <sup>+</sup>
83–86	B
80–82	B <sup>-</sup>
77–79	C <sup>+</sup>
73–76	C
70–72	C <sup>-</sup>
60–69	D
0–59	F

**Tentative Course Schedule:** Tests for the course are *very* tentatively scheduled for Wednesday, March 4, Friday, April 10, and Friday, May 4. As the course progresses, a detailed course schedule will be developed and posted on the course web site. This will be updated on a regular basis throughout the semester. At the start of the semester, the schedule posted on the

web site shows what was done the last time the course was taught. Expect this schedule and many of the assignment to change as the course progresses.

**Late Work:** Work not submitted by the due date will receive a grade of zero. If you have a legitimate reason for not submitting an assignment (e.g., illness) you may submit the assignment within one week of the due date (negotiable) along with a written explanation of why the work was late. If, in my judgment you have a valid reason for the late submission, I will either grade the work, grade the work with penalty, or exempt you from that assignment. If in doubt, contact me.

**General Policies:** Please read the Student Handbook!

Wofford's attendance policy is described in the Student Handbook. This course will enforce those policies. In particular, daily attendance will be taken! Arriving for class after the role has been taken or leaving class early will normally be considered an absence. While I tend to be fairly forgiving for excused absences, it is your responsibility to justify absence upon returning to class if you want me to consider excusing the absence. Ultimately, I reserve the right to decide which absences are excused. In particular, oversleeping is not an excusable absence. No unexcused absences are permitted for this class. Typically, the second unexcused absence will result in a formal warning and a third unexcused may result in a failing grade for the course.

Lectures in this class will expand and augment the material in the text. You will be responsible for all material covered in class including material that is not in the text or assigned readings! *If you have not read the assigned reading prior to class, you forfeit the privilege to ask any questions during that class!*

Work will only be returned to you; no one may pick up graded work for someone else. If you fail a test, you should come by to see me as soon as possible. Use of a recording device such as a tape recorder requires prior approval. Please *turn-off* and *put-away* all pagers and cell phones before the start of class. You may not use your cell phone in any way in during a test. Prohibited uses include using your phone as a calculator or watch.

*It is an expectation of the class (and the College) that you will check your Wofford email account on a daily basis.* I will occasionally use this to warn you of schedule changes or to provide additional advice on programs or homework assignments.

If you haven't already done so, please read Wofford's honor code. It can be downloaded from <http://www.wofford.edu/uploadedFiles/studentlife/0708honorCode.pdf>. Keep in mind that some of your CS assignments may be collaborative. A general document describing the Honor Code implications for such collaboration can be found at the CS Department's web site, [http://dept.wofford.edu/computer\\_science/Honor%20Code%20%20CS.pdf](http://dept.wofford.edu/computer_science/Honor%20Code%20%20CS.pdf). If in doubt about what is appropriate for a particular assignment, be sure to contact me for clarification. Also, please keep in mind, anyone assisting someone in a dishonest act (such as allowing your work to be copied) will also be considered culpable.

Reasonable accommodations for students with disabilities will be made. However, requests must be come through Dean Beth Wallace, Hugh R. Black Infirmary (597-4371). If you need accommodations or have questions, please during the first week of classes.

If you are in doubt about any of the above, please see me immediately. Please note, syllabi are subject to change upon notice.