

COSC 350A: Data Structures
Wofford College, Fall 2008

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

Email: My email address is 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:

8:20-9:20 & 10:30-12:00 Mondays, Wednesdays, and Fridays,
9:30-11:00 Tuesdays and Thursdays, and,
By appointment.

Class Schedule: 9:30-10:20 Monday, Wednesday, and Friday in (tentatively) 116 Olin Building

Final Examinations: Thursday, December 11, 9:00-12:00

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 of the Python programming language
- 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 instructional format is lecture-discussion. Testing and programming assignments will be used to insure the class goals are met.

Text and Supplies: The text for the course is

Problem Solving with Algorithms and Data Structures using Python. Bradley N. Miller and David L. Ranum, ISBN 1-59028-053-9, Franklin, Beedle & Associates, 2006.

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.

Course Web Site: There are three web sites you may be interested in visiting. The course web site <http://webs.wofford.edu/sloanjd/fall08/cosc350/index.html>. This will be developed and updated as the semester progresses. You should check this regularly for schedule information, etc. To go to the book web site, first go to <http://www.pythonworks.org/> and then follow the link to the Miller and Ranum book. Be sure to get a copy of the errata for the book. You can also download the source code from this site. Finally, the Computer Science Department's web site also has links you may find helpful: http://dept.wofford.edu/computer_science/.

Grading: There will be three quizzes scheduled during the semester that will collectively count 45% of your grade. There will be a cumulative final examination, counting 15% of your grade. The remaining 40% of your grade will come from routine homework and programming assignments. Some assignments may count more than others but this will usually be both obvious and announced in advance. If in doubt, ask.

Any points awarded toward an incorrect answer as partial credit are totally at my discretion.

Tentative Course Schedule: Test for the course are tentatively scheduled for Friday, September 26, Wednesday, October 22, and Friday, November 21. 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.

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 ⁻
87–89	B ⁺
83–86	B
80–82	B ⁻
77–79	C ⁺
73–76	C
70–72	C ⁻
60–69	D
0–59	F

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. 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.

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.

Visit <http://www.wofford.edu/uploadedFiles/studentlife/0708honorCode.pdf> to view Wofford's Honor Code. Keep in mind that some of your CS assignments may be collaborative. What might be an Honor Code infraction in one instance may not be in another. There is a general document describing collaboration and the Honor Code on the departmental web site at 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 come through Dean Beth Wallace, Hugh R. Black Infirmary (597-4371). If you need accommodations or have questions, please contact her as soon as possible. *You must arrange accommodations during the first week of class.*

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