

COSC 210-A Computer Science I

Class Hours: MWF 8:40 - 9:50 AM

Room: FSC 372

Fall Semester 2018

Instructor: Dan Steinwand

Email: dsteinwand@augie.edu

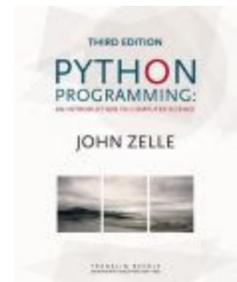
Office Location: FSC 386 605.274.4825

Office Hours: MTWRF 11:00am-12:00pm and by appointment

Course Catalog Description:

An introduction to computer science, which include topics such as software engineering, computer architecture, and programming languages. Emphasis on learning the styles, techniques, and methodologies necessary to design and develop readable and efficient programs.

Required Textbook(s): John Zelle: **Python Programming, 3rd Edition**, Franklin, Beedle & Assoc., 2016. ISBN: 9781590282755



Outcomes:

1. To learn how to develop computer programs using the Python programming language
2. To learn basic computer hardware and operating concepts such as CPU, memory, and file structure.
3. To learn fundamental structured programming concepts such as data types, data structures, selection constructs, iteration constructs, modularization, and data abstractions.
4. To learn fundamental object-oriented programming concepts such as classes and objects.
5. To learn basic sorting and searching algorithms.
6. To learn software engineering principles and methodologies for writing quality programs.

Attendance Policy: You must attend class to be successful in this topic. Many of our assignments will be started as in-class activities and will require your presence. Please contact me following unplanned absences due to illness, etc. so we can get you caught-up. You should contact me prior to planned and excused absences so we can keep you on-track/up-to-date. Don't be late! Any pop-quizzes will be given at the beginning of class.

General Timeline: (A class timeline with assignments and due dates is available on the class Google drive)

Week	Topics	Zelle	Academic Calendar Dates
1	Introductions/Overview of Computer Science at Augie, The Machine & Binary	Ch 1	Aug 29 (Wed) Start of classes
2	File systems, Programming environment	Ch 1	Sept 3 (Mon) Labor Day
3	Programs	Ch 2	
4	Numbers	Ch 3	
5	Objects and Graphics	Ch 4	
6	Exam 1 / Sequences	Ch 5	Exam 1 Weds Oct 3
7	Functions	Ch 6	
8	<i>Fall break</i> / Functions	Ch 6	Oct 15-16 (Mon-Tue) Fall Break Oct 17 (Wed) midterm grades due
9	Decisions	Ch 7	
10	Decisions	Ch 7	
11	Exam 2 / Loops and Boolean	Ch 8	Exam 2 Weds Nov 7
12	Lists, arrays, dictionaries	Ch 11	
13	Lists, arrays, dictionaries / <i>Thanksgiving</i>	Ch 11	Thanksgiving Nov 21-23
14	Java and other programming languages		
15	Java and other programming languages		
16	Final		9:00 Thursday Dec 13

Grading & Assignments:

12 Homework Assignments	20 pts each	240
10 pop quizzes	10 pts each	100
2 exams	180 pts each	360
<u>1 final</u> (180 pts new material, 120 pts cumulative)		<u>300</u>
Total		1000

Course Policies

- You are responsible for understanding the policies of this syllabus. With notice, this syllabus is subject to change.
- Grades will be assigned as follows:
 - A: 930 - 1000 A- : 900 - 929
 - B+ : 870 - 899 B: 830 - 869 B- : 800 - 829
 - C+ : 770 - 799 C: 730 - 769 C- : 700 - 729
 - D+ : 670 - 699 D: 630 - 669 D- : 600 - 629
 - F: less than 600
- Online material is available on the class Google Drive (to be shared with you following the first class meeting)
- **Homework assignments** often involve writing programs in a high-level language (Python3) and will coincide with lecture topics. These are due at the beginning of class. *Late work will not be accepted!* It is essential that you turn in assignments on time. If the assignment involves a program, it must run correctly to receive full credit (but partial credit will be given). In cases of extended illnesses or excused absences, an accommodation must be arranged before the assignment due date. Homework can be completed alone or with one other student. If completed with another student, the names of the collaborating students shall be noted on the assignment.
- **Pop quizzes** are given throughout the semester to verify that the student is keeping up with reading and notes. Handwritten notes written by the student taking the quiz on note cards (or half-sheets of paper) may be used; textbooks or printed slides are not allowed. If a quiz is missed due to an excused absence, an accommodation must be arranged before the next class meeting.
- **Two Exams** during the term are based on material discussed in class and a **Final Exam** (during finals week) will draw from material covered since the second exam as well as from material covered throughout the semester (see above). Make-up exams will only be given if a written excuse (a physician's note or evidence of a University- excused absence) is submitted to me. Make-up exams will be different than in-class exams and the material will generally be more difficult. During exams, no cell phones, calculators, or other electronic devices may be used. All notes and books must be inside your backpack, and your backpack must be closed and on the floor. You may not leave the room during the exam. After grading, exams will be handed back in class so that you can review it while we discuss the solutions. Phones and tablets should be kept in your backpack during this time. Before leaving the class, you must return your test. Tests that leave the room will receive a grade of zero. If you would like to see the exam again, you may stop by my office, but the exam may not leave my office.

I encourage you to see me throughout the semester. You can book a slot on my Google Calendar during office hours (linked above in the softcopy version of this document), drop-in during office hours (booked slots will take precedence) or arrange an alternate time with me via email or phone. My preferred form of communication is email.

Accessibility

Augustana welcomes students with disabilities to participate in all of its courses, programs, services, and activities. If you have a documented disability and are requesting accommodations, please contact Susan Bies, Director of Accessibility and Academic Support. Her office is located in the Student Success Center (Edith Mortenson Center, Suite 100) and she may be reached at 605-274-5503 or susan.bies@augie.edu.

Honor Code

As a community of scholars, the students and faculty at Augustana University commit to the highest standards of excellence by mutually embracing an Honor Code. The Honor Code requires that examinations and selected assignments contain the following pledge statement which students are expected to sign:

“On my honor, I pledge that I have upheld the Honor Code, and that the work I have done on this assignment has been honest, and that the work of others in this class has, to the best of my knowledge, been honest as well.”

Faculty members are responsible for investigating all instances involving any student who does not sign the Honor Pledge or who bring forward an academic integrity concern. The complete Honor Code can be found at www.augie.edu/honor.

Commitment to Diversity

Augustana University is committed to creating and fostering a learning and working environment based on open communication and mutual respect. This is an integral part of the academic mission to enrich our students' educational experiences and prepare them to live in and contribute to a global society. If you encounter sexual harassment, sexual misconduct, sexual assault, or discrimination please contact the Title IX Coordinator at 605-274-4044 or belam@augie.edu. If you make a report of this nature to a faculty member, they must notify the Title IX Coordinator about the basic facts of the incident (you may choose whether you or anyone involved is identified by name). For more information about options at Augustana, please visit www.augie.edu/titleix.

Cell Phones

In order to avoid distracting the class, please ensure that your cell phone is on silent or turned off during class. Texting during class is not acceptable. Your compliance will help to maintain the positive learning environment of our class period.