

CptS 111 Syllabus, v1.1, 1.23.23

Instructor Information

Instructor: Shira L. Broschat (Prof. Shira)
Office: EME 223
Email: shira@wsu.edu
Phone: 509.335.5693
OH: MW 3:10 – 4:00 pm (Spark 218), Th 6:15 – 7:15 pm (Zoom only)

Teaching Assistant Information

Lead TA: Pallavi Sharma, pallavi.sharma1@wsu.edu
UG TAs: Aziz Al-Dalaan, abdulaziz.al-dalaan@wsu.edu
Briana Weik, briana.weik@wsu.edu
Jordan Waring, jordan.waring@wsu.edu

UG TA OH: See Canvas or class website <<https://eecs.wsu.edu/~shira/cs111>>

Course Information

Course: CptS 111 [3 credits], Introduction to Computer Programming

Catalog description: Elementary algorithmic problem solving, computational models, sequential, iterative and conditional operations, parameterized procedures, array and list structures and basic efficiency analysis.

Prerequisites: MATH 101 with a C or better, MATH 103 with a C or better, or higher-level MATH course with a C or better, or a minimum ALEKS math placement score of 45%.

Lecture Time and Location: MW 2:10 pm – 3:00 pm, Spark 339

Labs (in EME 52):

- Lab 02L: W 5:10 pm – 8:00 pm (Briana Weik)
- Lab 03L: Th 10:35 am – 1:25 pm (Jordan Waring)
- Lab 04L: Th 1:30 pm – 4:20 pm (Aziz Al-Dalaan)

Grading:

Attendance/Participation (iClicker)	10%
Homework	10%
Labs	10%
Programming Assignments	10%
Exam #1	16%
Exam #2	20%
Final	24%

Your TA will grade your labs and PAs, so check with them if you have a question or concern about a grade. TAs and I will work as a team to grade your exams, so check with me if you have a question about your exam score.

Letter grades will be assigned as follows:

95-100:	A
90-94:	A-
85-89:	B+
80-84:	B
75-79:	B-
70-74:	C+
65-69:	C
60-64:	C-
50-59:	D
< 50:	F

Coursework:

- **Attendance/Participation:** iClicker polling will be conducted each lecture day. You will earn 8 of 10 points for answering half the questions regardless of whether your answers are correct. Two points will be awarded based on your number of correct answers. Discussion is encouraged, but it's not going to help you in the long run if someone just tells you the answer. *Three scores will be automatically dropped. If you miss class because you're sick, you must attend a required sporting event or other university event, you have a court date, you're having car trouble, you have a doctor's appointment, you overslept, or for countless other reasons, you're only entitled to these three drops and no additional ones.* **Note: Do not use the app from another location, i.e., you're not in class, because this is cheating (earning points for something you haven't done) which is a violation of academic integrity.** If you're caught doing this (attendance will be taken randomly), you will receive a zero for your overall Attendance/Participation score, and you will be reported to the Center for Community Standards. I also reserve the right to fail you for the course.
- **Homework:** zyBooks assignments will be due before 11:59 pm each lecture day. **Assignments must be accessed from Canvas**, and zyBooks will automatically submit and update scores, i.e., you don't have to do the homework in order or in one sitting. **LATE HOMEWORK WILL NOT BE ACCEPTED. 11:58:59 is on time; 11:59:00 is late.**
- **Labs:** Labs are graded on a percentage basis. You will receive 1 point for each task and an additional point for attendance (but only if you actually work on the labs—i.e., showing up for a half hour does not constitute "attendance"). Thus, each lab score will be $m/(n+1)*100$, where n is the number of tasks in a lab and m is the number you completed. Lab grades are posted under the lab section in Canvas.
- **Programming Assignments (PAs):** All PAs are due on Fridays. Four PAs called zyLab_PAs are in your textbook (access via Canvas) and are autograded each time you submit them. Submissions are unlimited. **ALL WORK MUST BE DONE IN YOUR zyBook. The four zyLab_PAs will be accepted late at any time with a 10% penalty applied each day up to 50%, e.g., if you turn one in the last week of classes that was due the fourth week and everything is correct, you'll earn 50%.** Prompts for three PAs will be downloaded from Canvas or the class website, and code will be uploaded to Canvas as a zipped file and graded by your lab TA. **You may submit these three PAs up to 3 days late with a penalty of 10% applied each day.** You may work together on PAs, but **DO NOT COPY CODE FROM SOMEONE ELSE OR FROM ANY OTHER SOURCE.** Your work must be your own, or it is cheating. Follow the guidelines recommended by the [Python Style and Coding Standards](#) when formatting your code. Use informative names for variables, functions, and so forth. Names such as `a` and `x` are easy to type, but they don't make code very readable. Instead use descriptive name such as `file_in` or `num_cars`. Use comments throughout your program. Be sure to include a header section on non-zyLab PAs and **include the names of students with whom you have worked in the header section.**

Taking CptS 121: A placement test for CptS 121 is available. If you score over 55 on it, you can enroll in CptS 121 even if you aren't calculus-ready or didn't have a sufficiently high ALEKS score. Please contact me if this is of interest to you. If you earn a B+ or better in CptS 111, you'll be able to take CptS 121 next spring (and CptS 122 is offered in the summer) regardless of your math status.

Make-up Exams, Labs, and Homework: If you know you're going to be absent for a legitimate reason on the day of an exam, you must contact me via email at least a week before the exam is scheduled. If you become ill, you must contact me via email on the day of the exam *before the exam has been given*. If you must miss a lab, notify your TA as soon as possible and do the tasks as best as you can so you don't fall behind. There are two make-up labs when you are allowed to make up the points for a **SINGLE** lab during each make-up lab. Homework is completed interactively when you do the reading for each lecture. You are free to read the textbook and to do the interactive homework at any time, even before it is assigned. After it has been assigned, you can follow the homework link to earn credit. Late homework is not accepted, but you should complete any activities you didn't complete on time to maximize your learning.

Textbook (required): *Introduction to Computer Programming*, an online, interactive textbook by zyBooks. The price is \$70 plus tax with the subscription ending on 5.20.23. **Sign in or create an account from Canvas** (Useful Links module). Enter the code WSUCPTS111BroschatSpring2023 if requested, and then subscribe. You'll need a credit card. **If you have problems, contact support@zybooks.com.**

iClicker Student subscription or iClicker 2 (required): **Subscribe, register your remote, or use your access code from the link provided at CptS 111 in Canvas under Useful Links in Modules (6-month subscription is \$15.99).** **iClicker polling will start Wed, 1.18.23.** If you can't find a grade in Canvas for the polling, then check the Student Guide link under Useful Links in Canvas. If all else fails, send email to iClicker support. *If you have an iClicker remote, press and hold the power button and set the frequency to AD.*

Expectations for Student Effort: This course should require between 10 and 15 hours per week but only if you start your PAs early and get help in a timely manner. You'll need to work hard and smart. Learning to code requires effort, and it also requires you to think. You can't just work on the lab tasks blindly; *you must think about what you're doing and read and reread the instructions.* You also need to learn when to ask for help: not too soon or you won't learn and not too late to avoid frustration.

Contesting Grades: See your TA or me **within a week** if you have a problem with a grade. **Be sure to check your grades in Canvas often.**

Course Schedule: For weekly details, please see the schedule on our class website. **All lectures will be posted after class together with a list of the topics covered.**

Learning Outcomes:

1. Decompose a problem into a series of steps
2. Know the proper Python styling guidelines and follow them when writing your own code
3. Understand the use of functions and know how to write them in Python
4. Differentiate between the different Boolean logic operators and use Boolean logic in your programs in Python
5. Differentiate between the different relational operators and use them in your programs in Python
6. Write complex conditional statements that contain one or more Boolean and/or relational operations in Python
7. Identify when a loop is appropriate, when to use both while- and for-loops, and write applications that use these looping constructs in Python
8. Understand the importance of lists and dictionaries in programming and identify when it is beneficial to use either in Python
9. Be able to perform basic string processing and manipulation in Python

10. Be able to plot basic graphs in Python
11. Leverage your knowledge of programming to answer complex, real-world problems

In addition, because this is a UCORE [QUAN] course, CptS 111 also has the following UCORE QUAN-designated learning goals:

1. Define, analyze, and solve problems
2. Access information effectively and efficiently from multiple sources
3. Convert relevant information into various mathematical forms
4. Understand and apply quantitative principles and methods to solve problems
5. Make judgments and draw appropriate conclusions based on quantitative analysis

Learning outcomes will be assessed using labs, programming assignments, and exams.

Software and Hardware (required): You must **bring your laptop to each lecture and lab** with [Python 3.10.x](#) or [3.11.x](#) (x can be any number; the larger, the more recent) installed. 3.6.x – 3.9.x are also fine.

Free Tutoring: Free tutoring for CptS 111 is available at the [VCEA Tutoring Center](#).

Reference Text: Algorithmic Problem Solving with Python by J.B. Schneider, S.L. Broschat, and J. Dahmen, a PDF open-access textbook (available at Canvas under the Useful Resources link).

python.org: There's a lot of useful information at [python.org](#), but it can be difficult to find what you want there. An index can be found at: [docs.python.org/3/genindex-all.html](#)

YouTube Videos: Short YouTube videos by Socratica on Python concepts (access via Canvas in the Useful Links module).

Reference Videos: Videos that accompany the first 7 chapters of the reference book listed above recorded by the lead author (access via Canvas in the Useful Links module).

Learning Management System: We'll use the [Canvas](#) LMS this semester.

Course Policies and Expectations and More Information

Email: The TAs and I will use your WSU email addresses or Canvas Announcements when communicating with the entire class so be sure to check these on a regular basis. *Have all announcements sent to your WSU email address (a little outdated; just click on the icon to change frequency), so you don't miss anything!*

Academic Integrity Policy: All members of the university community share responsibility for maintaining and promoting the principles of integrity in all activities, including academic integrity and honest scholarship. Students are responsible for understanding the full [Academic Integrity Policy](#). Students who violate WSU's Academic Integrity Policy (identified in WAC 504-26-010(3) and -404) will receive one warning and a zero on a programming assignment (PA). If there is a second violation, the student will fail the course, will not have the option to withdraw from the course pending an appeal, and will be reported to the Center for Community Standards. If you have any questions about what is and is not allowed in this course, ask me. Ignorance isn't a valid excuse. Also, it doesn't matter if you're the one who does the work and shares it with others. All participants are considered to have cheated.

Discrimination and Harassment: Discrimination, including discriminatory harassment, sexual harassment, and sexual misconduct (including stalking, intimate partner violence, and sexual violence) is prohibited at WSU (see WSU Policy Prohibiting Discrimination and Harassment (Executive Policy 15)

and WSU Standards of Conduct for Students). If you feel you have experienced or have witnessed discriminatory conduct, you can contact the WSU Office of Compliance and Civil Rights (CCR) and/or the WSU Title IX Coordinator at 509.335.8288 to discuss resources, including confidential resources, and reporting options. For more information, go to <https://ccr.wsu.edu>.

Students with a Documented Disability or Chronic Medical Condition: Reasonable accommodations are available for students with documented disabilities or chronic medical or psychological conditions. If you have such a condition and need accommodations to fully participate in this class, please visit the [Access Center website](#) to follow published procedures to request accommodations. Students may also schedule an appointment with a Disability Specialist by [email](#) or phone 509.335.3417. All disability related accommodations are to be approved through the Access Center. It is a university expectation that students connect with instructors (via email, Zoom, or in person) to discuss logistics within two weeks after they have officially requested their accommodations.

Accommodation for Religious Observances or Activities: Washington State University reasonably accommodates absences allowing for students to take holidays for reasons of faith or conscience or organized activities conducted under the auspices of a religious denomination, church, or religious organization. Reasonable accommodation requires the student to coordinate with the instructor on scheduling examinations or other activities necessary for course completion. Students requesting accommodation must provide written notification within the first two weeks of the beginning of the course and include specific dates for absences. Approved accommodations for absences will not adversely impact student grades. Absence from classes or examinations for religious reasons does not relieve students from responsibility for any part of the course work required during the period of absence. Students who feel they have been treated unfairly in terms of this accommodation may refer to Academic Regulation 104 – Academic Complaint Procedures.

Safety and Emergency Notification: Classroom and campus safety are of paramount importance at Washington State University and are the shared responsibility of the entire campus population. WSU urges students to follow the “Alert, Assess, Act,” protocol for all types of emergencies and the ["Run, Hide, Fight"](#) response for an active shooter incident. Remain ALERT (through direct observation or emergency notification), ASSESS your specific situation, and ACT in the most appropriate way to assure your own safety (and the safety of others if you are able). Please sign up for emergency alerts on your account at myWSU. For more information on this subject, campus safety, and related topics, please view the FBI’s [Run-Hide-Fight video](#) and visit the [WSU safety plan](#). Full details can be found at provost.wsu.edu/classroom-safety/.

Class Recordings: We will use technology for virtual meetings and/or recordings in this course. Our use of such technology is governed by FERPA, WSU’s [Electronic Communication Policy](#), and WSU’s [Student Code of Conduct](#). A record of all meetings and recordings is kept and stored by WSU, in accordance with WSU’s Executive Policies and FERPA. I will not share recordings of your class activities outside of course participants, which includes your classmates, TAs, and/or other instructional partners engaged with this course. **You may not share recordings with individuals outside of this course. Doing so may result in disciplinary action.**

Lauren’s Promise: I will listen and believe you if someone is threatening you.

Lauren McCluskey, a 21-year-old honors student athlete, was murdered on Oct. 22, 2018, on the University of Utah campus by a man she briefly dated. We must all take actions to ensure that this never happens again.

If you are in immediate danger, call 911.

If you are experiencing sexual assault, domestic violence, or stalking, please report it to me and I will connect you to resources or call Alternatives to Violence of the Palouse at 877.334.2887 (24-hour crisis hotline).

Any form of sexual harassment or violence will not be excused or tolerated at Washington State University. WSU has instituted procedures to respond to violations of these laws and standards, programs aimed at the prevention of such conduct, and intervention on behalf of the victims.

WSU Police officers will treat victims of sexual assault, domestic violence, and stalking with respect and dignity. Confidentiality is of the utmost importance, and WSU Police will assist by providing resources to victims. In addition to its law enforcement efforts regarding sexual assault, domestic violence, and stalking, WSU Police refer victims to the appropriate university and/or local community counseling and other resources devoted to assisting victims.

Advocates help survivors determine their own needs regarding their physical and emotional health, reporting options, and academic concerns. They connect survivors to campus and community services, and provide accompaniment to important appointments (court, hospital, and police) and support throughout the process. WSUPD can also connect you with advocacy services, if desired. The local advocacy group is Alternatives to Violence of the Palouse, whose services are free, immediate, and confidential.

Other confidential resources include WSU Counseling and Psychological Services. If you would like to speak with a counselor after business hours, WSUPD can contact the on-call counselor and have them call you directly, or a crisis telephone number is provided. Information shared with the counselor will not be provided to WSUPD without expressed permission from you.

WSU Counseling and Psychological Services: 509.335.2159 (crisis services line)

A Final Word of Advice

Stay on top of things! You don't want to fall behind because it's really hard to catch up! If you don't understand something, ask for an explanation as soon as possible. Learning to program is like learning to play the piano or learning to speak French—you have to practice and you have to memorize stuff.