Syllabus: CS 102 Multimedia Computing - Fall 2023

Class Time: Section 01: MWF 8am – 8:50am in Taylor 205

Section 02: MWF 9am – 9:50am in Taylor 205

Website: http://csweb.wooster.edu/dguarnera/cs102/
Professor: Drew Guarnera (dguarnera@wooster.edu)

Office: Taylor 313

Office Hours: MTWF by appointment

Textbook: The textbook is available online <u>via O'Reilly</u>. You can buy a physical copy if you like, but it is not required. See the course web page for a link to the book.

• Python Crash Course, 3rd Edition (ISBN: 1718502702)



Course Description: Together we discuss the field of Computer Science and its relation to the domain of multimedia content and applications. We will learn about different forms of multimedia and how this content is represented digitally with computers. Using the Python programming language, we explore:

- basic programming concepts
- problem solving strategies
- digital storage of text, images, and sound
- the binary and Hexadecimal number systems
- manipulation of multimedia formats programmatically
- the creation of interactive content like computer games

At the end of this course students will acquire the necessary skills to implement their own creative visions using code.

Course Goals: Upon completion of this course, a successful student will:

- understand foundational programming concepts
- apply basic software development techniques
- understand the representation of a variety of multimedia formats using computers
- create small to moderate-sized programs in Python

Prerequisites: None

Required Course Materials: Course Textbook, Laptop Computer (running either Windows, MacOS, or Linux), and a means for notetaking during class (this may be facilitated by the Laptop Computer).

Grading: Your final grade will be calculated as follows.

- 15% **Quizzes.** Regular Moodle quizzes assess whether you are engaging with the material outside of class, and to highlight important takeaways from the material. Quizzes, which are to be completed individually, will typically close at 8:00am on class days to encourage everyone to complete readings prior to class.
- 10% Engagement. You are expected to attend class, arrive on time, ask and answer questions, and participate in group work/discussion. Each class session will be worth two points. If you arrive to class on time, you will receive the first point. You may be asked to work on in-class activities to practice some course concepts. If you submit a complete activity, you will receive the second of the two points. If no in-class activity is assigned for that day, you will automatically receive both points for attending class and arriving on time. If you miss class or attend late, you will receive zero engagement points for the class session. You will NOT be able to make up engagement points.
- 20% Exercises. These assignments will generally consist of more involved coding or written assignments. All exercises are to be completed *individually*, unless otherwise explicitly stated in the instructions. Exercises will vary in length and relative difficulty with due dates set accordingly. All exercises must be submitted on or prior to the due date.
- 30% *Exams.* There will be two intermediate exams. The course website will provide tentative dates.
- 25% *Final Project.* The final project is in place of a final examination. This project will be a team project and requires a project implemented using Python and a project presentation.

This class uses the standard grading scale:

Α	Α-	B+	В	B-	C+	С	C-	D	F	
93%	90%	87%	83%	80%	77%	73%	70%	60%	below	

Note that the main purpose of homework assignments is to provide opportunities to practice what you learn. It is expected that much of your learning will come from practice! I hope that you understand the value of this work, and do not regard it solely as a grading source. With this in mind, the instructor may choose to grade a subset of homework assignments. The remaining subset may be graded partially or based on whether the work was submitted.

Pass/Fail option. Students are permitted to elect the equivalent of four courses (in addition to Senior Independent Study) graded S/NC out of 32 courses required for graduation [excluding courses taken S/NC in Spring 2020, Fall 2020, and Spring 2021]. The minimum equivalent grade to earn S in courses graded S/NC is C-. The deadline for electing a Pass-Fail grading option is one week after final grades are posted.

Course Drop. Students may drop any course without petition by Tuesday, September 26, 2023. Students may drop a course with petition by Friday, December 1, 2023. The minimum enrollment of 3.0 credits remains in effect. Requests to drop enrollment below 3.0 credits will require additional documentation via Other academic petitions.

Attendance: We work best as a learning community when everyone participates. As such, it is expected that you will attend class at scheduled times and in accordance with health and safety protocols. If you are unable to attend, I encourage you to check the course website and get notes from a classmate to catch up on missed materials. I will communicate to you in a timely manner any changes to this schedule. Per college policy, a student may not miss more than 25% of class meetings (e.g., ~3.5 weeks of class for a full-credit course in fall/spring semesters), through any combination of excused and unexcused absences. If this occurs, the instructor will notify the Dean for Curriculum and Academic Engagement and the Dean of Students for consultation.

Technology: Our class works best when we use our devices to further our learning. I encourage you to only use technology during class time to enable, rather than to distract from, our learning and community building. During class, we'll write code. Bring your laptop to every day.

Communication: Communication is the key to success. Contact me as soon as possible if you are struggling with material or if a conflict arises. The best way to contact me outside of class in by coming to my office hours, or asking a question via email. I primarily read emails between 9am and 5pm Monday through Friday. Please allow at least 24 hours response time for any communication. While I usually respond faster, but you should not rely on this. Please keep in mind when contacting me over the weekend that the response time may be longer (allow for roughly 48 hours).

Late Policy: I will do my best to grade and return assignments to you as soon as I can. Late submissions make timely grading much more difficult. As such, late assignments will be subject to a 30% penalty if the assignment is turned in on the same day as the due date (e.g. an assignment due before class is turned in after class). No late assignments are accepted after this point and the grade will be a zero.

Accommodations: Your success in this class is important to me. We all need accommodations to learn effectively. If there are aspects of this course that prevent you from learning or exclude you, please let me know as soon as possible. You do not need to share specifics, but we can work together to develop strategies to meet both your needs and the requirements of the course, and to identify specific resources that may assist you.

Names and Pronouns. All people have the right to be addressed and referred to in accordance with their personal identity.

We include pronoun introductions to avoid gender-based assumptions and to ensure that the correct pronoun is used when referring to you. I will do my best to address and refer to all students by the names and pronouns shared in class, regardless of what is listed on the roster, and I support classmates doing so as well. In this class, you will have the chance to indicate the name that you would like to be called and, if you choose, to identify pronouns with which we would like to be addressed. The name and pronoun(s) that you use may change and, if they do, please let us know you would like us to change how we address you. If you are interested in changing your chosen name and pronoun(s) in the College of

Wooster system, you can find additional information <u>here</u>. If you would like, you can also add the phonetic spelling & pronunciation of your name in your Moodle Profile:

- add the phonetic spelling of names in your Profile under "Additional Names"
- and you can record pronunciation under "Description" (using the microphone button to record).

Class Policies: For this class to be effective, you must be an active learner. You are expected to contribute to each class session. This includes arriving on time, actively working on in-class activities, asking questions, and answering others' questions. Students that are successful in this course are those who are responsible in their preparation. This means reading the assigned chapters, checking the course website for updates and upcoming deadlines, and completing assignments in a timely manner. Behavior that is discouraged includes, but is not limited to, disrespectful interactions such as yelling/cursing, intolerant language, tardiness, and misuse of technology for purposes unrelated to the class. Students that do not abide by the standards for classroom interactions by engaging in behaviors which disrupt and distract in the learning environment will be subject to the procedures laid out in Scot's Key.

Academic Integrity: You are expected to know and abide by the rules of the institution as described in The Scot's Key and the Handbook of Selected College Policies (found here. Dishonesty in any of your academic work is a serious breach of the Code of Academic Integrity and is grounds for an F in this course. Such violations include turning in another person's work as your own, sharing code, copying from any source without proper citation, and violating expectations for a group project. You may discuss ideas with your peers. Sharing solutions, your code, or accepting code from other students is not allowed under any circumstance. If you are unsure what is permissible, please contact me with any questions.

Additionally, my expectation is that you will not use any artificial intelligence (AI)-powered programs (e.g., ChatGPT or DALL-E) to help you with your assignments for this course. Any use of AI-generated work to outline, write, create, or edit your assignments will be considered an academic integrity violation. These programs may provide inaccurate or biased information, but more importantly, they do not serve your development as a student. In this course you will learn valuable skills from outlining, generating, and editing your own work. If you have any questions about this policy or are not sure if a resource you have found will violate this policy, please ask me.

Conflicts with Academic Responsibilities: When conflicts arise between academic commitments and complementary programs (including athletic, cultural, educational, and volunteer activities), students, faculty, staff, and administrators all share the responsibility of minimizing and resolving them. The College expects students to give the highest priority to their academic responsibilities. As a student you have the responsibility to inform me of potential conflicts as soon as you are aware of them, and to discuss and work with me to identify alternative ways to fulfill your academic commitments without sacrificing the academic integrity and rigor of the course.

Title IX: The College is committed to fostering a campus community based on respect and nonviolence. To this end, we recognize that all Wooster community members are responsible for ensuring that our community is free from discrimination, gender bias, sexual harassment, and sexual assault. In accordance with Title IX, Wooster is legally obligated to investigate incidents of sexual harassment and sexual assault that occur on our campus. Faculty who become aware of an incident of sexual violence, including harassment, rape, sexual assault, relationship violence, or stalking, are required by law to notify Wooster's Title IX Coordinator. The purpose of this disclosure is to ensure that students are made aware of their reporting options and resources for support. For more information about your rights and reporting options at Wooster, including confidential and anonymous reporting options, please visit here.

MCS Department: The College of Wooster is committed to inclusive excellence in undergraduate education, and our department seeks to actively foster a welcoming learning environment in which diversity and individual differences are valued, respected, and celebrated. Diversity comes in many forms, including but not limited to, race, color, national origin, ancestry, sex, gender identity and expression, sexual orientation, socioeconomic status, religion, age, and physical and/or mental abilities. The diversity that students and staff bring to the classroom is an invaluable resource, strength, and benefit to everyone at the College of Wooster. As such, we are vigilant and attentive about issues of diversity, equity, and inclusion

in the classroom. Expressions or actions disparaging others are contrary to the mission of the department and will not be tolerated.

Additional Resources. Please view the course website for additional links and resources, including information on Moodle, the Academic Resource Center, Library Support, health and safety guidelines, Title IX, and discriminatory or bias-related harassment reporting.

We're All Human. Let's all practice empathy, kindness, and understanding - towards each other and ourselves. Although every effort has been made to make this syllabus as complete as possible, changes may occur regarding the course schedule, grading, assignments, and office hours. I reserve the right to make changes to this syllabus and other course resources if necessary. Any changes will be communicated in a timely manner.