Course COMP1010: Programming for All 1 Credits 3 **Pre-regs** None This course is designed for students who are not intending to be Computer Science majors who desire a practical course for gaining basic computer programming skills. The course will use the Python programming language to develop skills in problem-solving, debugging, acquiring real-world data, processing data, and interacting with and visualizing solutions. The course will show the power in writing small programs that leverage existing code to create interesting applications. Examples from a variety of fields will be used to illustrate the utility of computers and programming. The goal for the end of the course is for students to feel confident in their ability to write useful, small-scale programs in their area of interest. At the end of the course, students will be able to write small functions and scripts in Python to accomplish desired tasks • use external Python code in their own programs to add functionality to their programs debug and modify small programs • use object-oriented constructs within their programs • take a real-world task and see how to use programs to automate or analyze that task Fair warning The pacing in this class is brisk. Students should spend a considerable amount of time reading, watching videos, studying, and solving problems outside of class. Please refer to the How to Succeed In This Course page for more information on what to expect from this class. **Course Materials** Website The class website is the Canvas course available through CIS. It will be updated throughout the semester with the class schedule, lecture notes, laboratory exercises, assignment specifications, and much more. Lecture Notes The instructor will often make use of slides and other documents during lecture. These documents will be posted on the class website following the lecture; however, such posted documents may not represent completely the material covered in class. Students who must miss class are strongly encouraged to check with a classmate or TA. Python All programming in COMP1010 is in Python. Python is available for your use on the lab machines. Instructions for installing both on your personal computer is available on the class website in the Class Resources module. Textbook This course will use a variety of web resources, including readings and exercises from a free online, interactive textbook from https://runestone.academy/runestone/books/published/fopp/index.html **Student Evaluation** Assignments The instructions for each assignment and its due date will be posted on the class website roughly one week before it must be submitted. Assignments are submitted online via the submission tool located beneath the instructions for each assignment. It is the student's responsibility to ensure the successful and timely submission of each programming assignment — start early and follow the instructions carefully. Corrupted or missing files will not be grounds for extensions. Double-check your submissions, and save a digital copy of all of your work. Late Assignments There is a one-day grace period for late assignments. Assignments turned in after the due date will receive a 10% deduction in the grade. No assignments will be accepted more than 24 hours late, at which point a 0% will be assigned. In general, you should use the dropped score (described below) as the way this course handles the problems we all face during the semester rather than asking for instructors' consent for late work. Longer term issues should be discussed with the instructors -- we are not trying to fail students! Lab Exercises Students in labs generally work through online quizzes with the aid of the lab TAs. The lowest 2 lab scores will be dropped, which can help you manage unexpected (or expected) problems with attendance. Labs will focus on additional material that is helpful for completing assignments. Additionally, labs are very beneficial for reviewing material covered in class -- attendance is expected. **Coding Midterm** The lab period on Friday, March 4, 2022, will be devoted to the practical coding midterm -- you will be given a series of programming problems that will be solved during the lab period for a score. This does not count as a droppable lab score. Tests and Final Exam There will be two in-class tests and a final exam. • Test 1 is on Wednesday, February 9, 2022, during the class meeting. • Test 2 is on Wednesday, April 6, 2022, during the class meeting. • Final Exam is on **Monday**, **May 2**, **2022**, from 1:00 – 3:00 pm. These exams will be paper-based and in-person. These tests cannot be missed except for a documented medical emergency. **Runestone Exercises** This course will have assigned reading and exercises from the Runestone e-textbook. You will need to register on that site, enroll in this course, and do readings and exercises as given. For more information, please refer to the page on using the course e-textbook under Course Resources. The assigned exercise must be completed before class on Wednesday to count, and you must be logged in with your account that uses your UID as the account name. These exercises, along with quizzes, count towards your final course grade. The four lowest grades for assigned Runestone exercises or quizzes combined will be dropped. Quizzes Quizzes will be available on Gradescope on the material covered in the topics. These quizzes are designed to be an assessment tool for yourself so that you know whether or not you have the expected understanding of the material. You will have two chances to take the quiz, and will be able to see which questions you missed. The four lowest grades for assigned exercises or quizzes combined will be dropped. Participation Participation is an important component of this course because active engagement facilitates learning. If you choose not to be engaged during lecture and lab, you are harming your own experience with the material. Participation will not be graded explicitly because we find that active participation is associated with success in other graded aspects of the course. Final Course Grade The final course grade is based on: Assignments 40%, Tests 15%, Coding Midterm 10%, Final Exam 15%, Labs 10%, Runestone and Online Quizzes 10%. Your weighted, cumulative course percentage score is turned into letter grades using the following scheme: [100-94] A, (94-90] A-, (90-87] B+, (87-84] B, (84-80] B-, (80-77] C+, (77-74] C, (74-70] C-, (70-67] D+, (67-64] D, (64-60] D-, (60-0] E where [] means including that number and () means up to but not including. Regrades Students desiring to appeal a score on an assignment, lab exercise, quiz, test, or final exam must do so via Gradescope and no later than one week after the score is published. We reserve the right to regrade the entire assignment when a regrade request is made. **Dropped Scores** Students may end up missing a deadline or a lab session for a reason that is not granted an exception (generally, documented medical reasons or official University activities). Therefore, to allow for such an occurrence, the lowest score earned on an assignment, and the lowest two scores on lab exercises are dropped from the record of each student at the end of the semester. Students should plan to use the "drop scores" judiciously — there is only one for an assignment, and two for a lab. These dropped scores are automatically applied. No test or final exam scores are dropped. **Getting Help Instructor office hours** See the <u>Help Hours</u> page in the Course Resources module. Teaching assistants and help hours See the Help Hours page in the Course Resources module. During consultation, use the TA Queue (also on the class website) to alert the TA on duty that you have a question. TA Help hours are held on Zoom and in person in the CADE lab. Communication For questions outside of class and help hours, students are required to use Piazza. The teaching staff will actively monitor all discussions, and we will often be able to provide a quick response that might be useful to many students. Be mindful of our cheating policy and do not post things such as solutions to homework assignments or code snippets from your solution. Regardless of communication medium, DO NOT SHARE THESE WITH ANOTHER STUDENT until after assignments have been graded and returned. To send urgent messages to everyone in the class, such as corrections to assignments or changes in due dates, the course staff will make use of Piazza. Students are expected to check Piazza regularly. We recommend signing up for email notifications from Piazza as well. In general, we can often provide quick and detailed responses through Piazza and it is an excellent mechanism for getting feedback. Emails of a more administrative nature (i.e., questions about grades, illness) can be sent directly to Rush at <u>rush.sanghrajka@utah.edu</u>. See further instructions on the <u>Contacting Course Staff</u> page in the Course Resources module. **Course Guidelines** Behavior during class activities All students are expected to maintain professional behavior, according to www.regulations.utah.edu/academics/guides/students/studentRights.html (the University of Utah Student Code). Students should read the Code carefully and know that they are responsible for the content. According to Faculty Rules and Regulations, it is the faculty responsibility to enforce responsible classroom behaviors, beginning with verbal warnings and progressing to dismissal from class and a failing grade. Students have the right to appeal such action to the Student Behavior Committee. Working together Students are encouraged to discuss assignments and laboratory exercises with fellow classmates, but each student is responsible for formulating and writing their own answer. Cheating is: sharing written or electronic work either by copying, retyping, looking at, or supplying a copy. Cheating is not: discussing concepts, answering questions about concepts or clarifying ambiguities, or helping someone understand how to use the class tools and software. Students may occasionally be required to work on assignments or lab exercises in pairs. Guidelines and rules for working together will be posted with such assignments. Cheating is taken very seriously and students must be careful not to collaborate on assignments. Further details about what constitutes cheating, and what the resulting actions by the course staff will be, can be found under Course Resources. Submissions are routinely checked by the course staff for signs of unauthorized collaboration. There must be no collaboration during tests or the final exam. Please see the University of Utah Student Code for a detailed description of the university policy on cheating. Any student found cheating will fail the entire course. We will adhere by the <u>School of Computing policy on academic misconduct</u> □→. College of Engineering guidelines For information on withdrawing from courses, appealing grades, and more, see the College of Engineering guidelines at https://www.coe.utah.edu/students/academic-affairs/academics/semester-guidelines/ Inclusivity It is our intent that students from all diverse backgrounds and perspectives be well-served by this course, that students' learning needs be addressed both in and out of class, and that the diversity that the students bring to this class be viewed as a resource, strength and benefit. It is our intent to present materials and activities that are respectful of diversity: gender identity, sexuality, disability, age, socioeconomic status, ethnicity, race, nationality, religion, and culture. We also expect students to treat everyone in the class (including the teaching staff) in a respectful manner. The following resources are available to students for more information: U of U Office of Inclusivity Center for Ethnic Student Affairs LGBT Resource Center **American Indian Resource Center** Office of Equal Opportunity, Affirmative Action, and Title IX **Center for Student Wellness** Student names & personal pronouns Class rosters are provided to the instructors with the student's legal name as well as "Preferred first name" (if previously entered by you in the Student Profile section of your CIS account). Please advise the instructors of any name or pronoun changes (and update CIS) so we can help create a learning environment in which you feel respected. If you need assistance getting your preferred name on your UID card, please visit the LGBT Resource Center Room 409 in the Olpin Union Building, or email bpeacock@sa.utah.edu to schedule a time to drop by. The LGBT Resource Center hours are M-F 8am-5pm, and 8am-6pm on Tuesdays. **NOTE:** This syllabus is meant to serve as an outline and guide for our course. Please note that the instructors may modify it with reasonable notice to you. The instructors may also modify the course schedule to accommodate the needs of our class. Any changes will be announced in class and posted on Canvas under Announcements. **University Policies COVID-19 Campus Guidelines** Drop/Withdrawal Policies Plagiarism and Cheating Course Materials Copyright Safety at the U Wellness at the U Addressing Sexual Misconduct Americans With Disabilities Act (ADA) Diverse Student Support Course Summary: Due **Date Details** COMP 1010 Wednesday Lectures Wed Jan 12, 2022 2pm to 3pm Lab 0 Quiz Fri Jan 14, 2022 due by 5:30pm **EXECUTE:** COMP 1010 Wednesday Lectures Wed Jan 19, 2022 2pm to 3pm Lab 1 Quiz Fri Jan 21, 2022 due by 5:30pm **EXECUTE:** COMP 1010 Wednesday Lectures 2pm to 3pm Wed Jan 26, 2022 Assignment 1: ASCII Art due by 11:59pm Fri Jan 28, 2022 **₽** Lab 2: Modules and Turtles due by 5:30pm **EXECUTE:** COMP 1010 Wednesday Lectures 2pm to 3pm Wed Feb 2, 2022 Assignment 2: Fun with Turtle due by 11:59pm Fri Feb 4, 2022 Lab 3: Strings and Loops due by 5:30pm **EXECUTE:** COMP 1010 Wednesday Lectures 2pm to 3pm Wed Feb 9, 2022 February Weekly Readings due by 2pm Fri Feb 11, 2022 Weeks 0-3 Review Quiz due by 11:59pm **COMP 1010 Wednesday Lectures** 2pm to 3pm Reading for Week 5 (Due Wed 2/16) Wed Feb 16, 2022 to do: 2pm Assignment 3: Advanced Loops due by 11:59pm **EXECUTE:** COMP 1010 Wednesday Lectures 2pm to 3pm Readings for Week 6 (due by Wed Feb Wed Feb 23, 2022 to do: 2pm Assignment 4: Image Processing due by 11:59pm Wed Mar 2, 2022 **EXECUTE:** COMP 1010 Wednesday Lectures 2pm to 3pm Coding Midterm Fri Mar 4, 2022 due by 11:59pm **EXECUTE** COMP 1010 Wednesday Lectures Wed Mar 9, 2022 2pm to 3pm **EXECUTE:** COMP 1010 Wednesday Lectures 2pm to 3pm Wed Mar 16, 2022 Reading for Week 9 (due by Wed Mar to do: 2pm COMP 1010 Wednesday Lectures 2pm to 3pm Wed Mar 23, 2022 Reading for Week 10 to do: 2pm Assignment 5: Sound Effects due by 11:59pm Lab 7: Handling Text Files Fri Mar 25, 2022 due by 5:30pm **EXECUTE:** COMP 1010 Wednesday Lectures 2pm to 3pm Wed Mar 30, 2022 Assignment 6: Analyzing a Novel due by 11:59pm Fri Apr 1, 2022 Lab 8: Nested Dictionaries due by 5:30pm **COMP 1010 Wednesday Lectures** 2pm to 3pm Reading for Week 11 to do: 2pm Wed Apr 6, 2022 Test 2 due by 2:50pm Fri Apr 8, 2022 Weeks 5-11 Review Quiz due by 11:59pm **EXECUTE** COMP 1010 Wednesday Lectures 2pm to 3pm Reading for Week 13 (due Wed 4/13) to do: 2pm Wed Apr 13, 2022 Assignment 7: Working with Data, Part due by 11:59pm Lab 9: Loops and Error Handling due by 5:30pm Fri Apr 15, 2022 Lab 10: Objects, Iterables, and Error Fri Apr 22, 2022 due by 6pm Handling Assignment 8: Working with Data, Part Mon Apr 25, 2022 due by 11:59pm Final Exam Mon May 2, 2022 due by 11:59pm April Weekly Readings Extra Credit Opportunity January Weekly Readings Lab 10: Practice with iterables, loops, exceptions Lab 4: Working with Images Lab 5: Lists and Debugging Lab 6: Working with IF statements March Weekly Readings Reading Assessments Grade Test 1

COMP 1010-001 Spring 2022 > Syllabus

Course Syllabus

Critical Information

Instructor Rush Sanghrajka

Instructor contact (only for private matters): Piazza

Instructors

Class Meetings

Lab Sessions

Textbook

Important Dates

Final Course Grade

Communication

Course Information

IMPORTANT NOTE: Due to COVID-19, all dates and policies contained in the syllabus and Canvas course are subject to

Course Staff Contact through Piazza

Mondays and Wednesdays 2:00-2:50p in L104 WEB, led by Rush. Students should come to class prepared and expect

This course will use a variety of web resources, including readings and exercises from a free online, interactive textbook

All tests are in-person and cannot be missed except for documented emergencies and you should plan around them.

Assignments 40%, Tests 15%, Coding Midterm 10%, Final Exam 15%, Labs 10%, Runestone and Online Quizzes 10%.

This class will use Piazza for most communication-- emailing the course staff is discouraged, as those are difficult to

track with such a large class. Please refer to the communication section below for more information, and the Contacting

to practice solving problems individually and in small groups. See the course format for more information.

Friday lab sessions in WEB L124. Lab attendance at your registered lab session is required and has graded work.

Instructor Prof. Ross Whitaker

Instructor email (only for private matters): Piazza

change. Students can expect to be informed immediately and clearly of any changes.

from https://runestone.academy/runestone/books/published/fopp/index.html

• Test 1 is on Wednesday, February 9, 2022, during the class meeting.

• Coding Midterm is on Friday, March 4, 2022, during the lab session.

See below for detailed information about student evaluation for this course.

• Test 2 is on Wednesday, April 6, 2022, during the class meeting.

• Final Exam is on Monday, May 2, 2022, from 1:00 - 3:00 pm.

Course Staff page under the Course Resources module.

Spring 2022

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October 2022

10 11 12 13 14 15

Weight

2%

15%

40%

10%

10%

0%

10%

15%

102%

16 17 18 19 20 21 22

23 24 25 26 27 28 29

30 31 1 2 3 4 5

Assignments are weighted by

group:

Group

Tests

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Extra credit

Assignments

Final Grade

and Quizzes

Final Exam

Total

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Reading Assessments

Reading Assessments

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