Course Name: COMPUTER PROGRAMMING FOR NON-CS MAJORS
Course Number: CS 201
Credits: 3
Instructor name: Brian Baker
Instructor email: bakerb6@oregonstate.edu

Course Description

This course covers a variety of fundamental topics in computer programming which will be relevant to anyone who wants to write or work with computer code in their work or studies. The course will teach basic computational thinking and programming skills which will allow students to solve a variety of real world problems. In addition, students will learn more advanced topics such as how some basic algorithms work and can be written in computer code.

Communication

Please post all course-related questions in the Q&A Discussion Forum so that the whole class may benefit from our conversation. Please contact the instructor or TA privately for matters of a personal nature, who will reply to course-related questions within 24 hours during business hours on weekdays, as well as return your assignments and grades for course activities to you within five days of the due date.

Course Credits

This 3-credit course involves approximately 9 hours of work per week, intended for you to distribute approximately as follows:

- 1 hour of video lecture per week
- 2 hours of textbook reading per week
- 1 hour of online discussion per week
- 2 hours of other ungraded active learning exercises per week
- 2 hours of graded homework per week
- 1 hour of studying for the exams per week

Technical Assistance

If you experience any errors or problems while in your online course, contact 24-7 Canvas Support through the Help link within Canvas. If you experience computer difficulties, need help downloading a browser or plug-in, or need assistance logging into a course, contact the IS Service Desk for assistance. You can call (541) 737-8787 or visit the IS Service Desk online.

Learning Resources

- Textbook absolutely required for all students...
  - Al Sweigert, "Automate the Boring Stuff with Python: Practical Programming for Total Beginners", No Starch Press, ISBN 978-1593275990.
  - Available for purchase at Amazon.com
  - Or for free online at https://automatetheboringstuff.com/
- Online documentation for Python... https://www.python.org/doc/

Note to prospective students: Please check with the OSU Beaver Store for up-to-date information for the term you enroll (OSU Beaver Store Website or 800-595-0357). If you purchase course materials from other sources, be very careful to obtain the correct ISBN.

Measurable Student Learning Outcomes

1. Translate a problem statement into an appropriate coding solution containing arithmetic, relational, and logical expressions.
2. Develop a program that reads data from a local data file and from the web.
3. Develop a program that uses dynamic memory allocation.
4. Develop a program that uses a List data structure.
5. Develop a program that uses a Dictionary data structure.
6. Develop a program that uses a 3rd party library.

Evaluation of Student Performance

Graded work:

- Participation: 100 points (primarily online discussion)
- Homework: 500 points
- Final exam: 400 points

Letter Grade:

- A: 930+ pts
- A-: 900-929
- B+: 870-899
- B: 820-869
- B-: 800-819
- C+: 770-799
- C: 720-769
- C-: 700-719
- D+: 670-699
- D: 620-669
- D-: 600-619

Course Content
Typical week
- Monday: 1 hour of video lecture and 2 hours of textbook reading
  - o Deferring these until Tuesday will typically not cause any problems
- Tuesday-Wednesday: 1 hour of online discussion and 2 hours of learning activities
  - o All students must post to the Wednesday discussion on or before 11:59 pm (Pacific time)
  - o Additional learning activities are generally not graded unless explicitly indicated in the syllabus
- Thursday-Friday: 2 hours of graded homework and 1 hour of studying for exams
  - o The homework technically is not due until 11:59 pm (Pacific time) on Sunday
  - o It is wise to start the homework on Thursday or Friday
  - o Online instructors and/or teaching assistants will generally be available to answer questions online during normal business hours on weekdays.
  - o They will not necessarily be as available over the weekend. Plan ahead.

Course outline

Week	Topic and Video Coverage	Reading Assignments	Learning Activities
1	Creating and running programs	Python overview and installation instructions	Discussion on value of programming; exercise installing and using Python
2	Understanding what programs are	Textbook's Chapter 1 on Python details	
3	Structuring your program	Textbook's Chapters 2 and 3 on conditionals and loops	
4	Structuring your data	Textbook's Chapters 4 and 5 on lists and dictionaries	
5	Transforming your inputs	Textbook's Chapters 6 and 7 on manipulating strings and using regular expressions	
6	Reading and writing data	Textbook's Chapters 8, 9 and 11 on reading and writing files and data from the web	
7	Putting it all together	Textbook's Chapters 12 and 14 on file formats	
8	Saving yourself work		

Week	Topic and Video Coverage	Reading Assignments	Learning Activities
9	Getting better at solving problems		
10	Creating high-quality programs		
Finals			

Course Policies

Discussion Participation
Students are expected to participate in discussions each week. While there is great flexibility in online courses, this is not a self-paced course. You will need to participate in at least one discussion, with your first post due no later than Wednesday evening at 11:59 pm (Pacific time). Online instructors and/or teaching assistants will generally be available to answer questions online during normal business hours on weekdays.

Late Work Policy
Although the course is structured with the intent that students can complete homework assignments on or before Friday, homework is officially due by 11:59 pm (Pacific time) on Sundays. Homework assignments may be submitted late after this official due date, but they will be penalized at a rate of 1 lost point per assignment per day (rounded up). Online instructors and/or teaching assistants will generally be available to answer questions online during normal work hours on weekdays. They will not necessarily be available over the weekend. Plan ahead.

Makeup Exams
Makeup exams will be given only for missed exams excused in advance by the instructor. Excused absences will not be given for airline reservations, routine illness (colds, flu, stomach aches), or other common ailments. Excused absences will generally not be given after the absence has occurred, except under very unusual circumstances.

Incompletes
Incomplete (I) grades will be granted only in emergency cases (usually only for a death in the family, major illness or injury, or birth of your child), and if the student has turned in 80% of the points possible (in other words, usually everything but the final paper). If you are having any difficulty that might prevent you completing the coursework, please don't wait until the end of the term; let me know right away.

Guidelines for a Productive and Effective Online Classroom
Students are expected to conduct themselves in the course (e.g., on discussion boards, email) in compliance with the university's regulations regarding civility. Civility is an essential ingredient for academic discourse. All communications for this course should be conducted constructively, civilly, and respectfully. Differences in beliefs, opinions, and approaches are to be expected. In all you say and do for this course, be professional. Please

bring any communications you believe to be in violation of this class policy to the attention of your instructor.

Active interaction with peers and your instructor is essential to success in this online course, paying particular attention to the following:

- Unless indicated otherwise, please complete the readings and view other instructional materials for each week before participating in the discussion board.
- Read your posts carefully before submitting them.
- Be respectful of others and their opinions, valuing diversity in backgrounds, abilities, and experiences.
- Challenging the ideas held by others is an integral aspect of critical thinking and the academic process. Please word your responses carefully, and recognize that others are expected to challenge your ideas. A positive atmosphere of healthy debate is encouraged.

Statement Regarding Students with Disabilities
Accommodations for students with disabilities are determined and approved by Disability Access Services (DAS). If you, as a student, believe you are eligible for accommodations but have not obtained approval, please contact DAS immediately at 541-737-4098 or at http://ds.oregonstate.edu. DAS notifies students and faculty members of approved academic accommodations and coordinates implementation of those accommodations. While not required, students and faculty members are encouraged to discuss details of the implementation of individual accommodations.

Accessibility of Course Materials
All materials used in this course are accessible. If you require accommodations please contact Disability Access Services (DAS).

Additionally, Canvas, the learning management system through which this course is offered, provides a vendor statement certifying how the platform is accessible to students with disabilities.

Expectations for Student Conduct
Student conduct is governed by the university's policies, as explained in the Student Conduct Code. Students are expected to conduct themselves in the course (e.g., on discussion boards, email postings) in compliance with the university's regulations regarding civility.

Academic Integrity
Students are expected to comply with all regulations pertaining to academic honesty. For further information, visit Student Conduct and Community Standards, or contact the office of Student Conduct and Mediation at 541-737-3656.

OAR 576-015-0020 (2) Academic or Scholarly Dishonesty:

a) Academic or Scholarly Dishonesty is defined as an act of deception in which a Student seeks to claim credit for the work or effort of another person, or uses unauthorized materials or fabricated information in any academic work or research, either through the Student's own efforts or the efforts of another.

b) It includes:
   i) CHEATING - use or attempted use of unauthorized materials, information or study aids, or an act of deceit by which a Student attempts to misrepresent mastery of academic effort or information. This includes but is not limited to unauthorized copying or collaboration on a test or assignment, using prohibited materials and texts, any misuse of an electronic device, or using any deceptive means to gain academic credit.
   ii) FABRICATION - falsification or invention of any information including but not limited to falsifying research, inventing or exaggerating data, or listing incorrect or fictitious references.
   iii) ASSISTING - helping another commit an act of academic dishonesty. This includes but is not limited to paying or bribing someone to acquire a test or assignment, changing someone's grades or academic records, taking a test/doing an assignment for someone else by any means, including misuse of an electronic device. It is a violation of Oregon state law to create and offer to sell part or all of an educational assignment to another person (ORS 165.114).
   iv) TAMPERING - altering or interfering with evaluation instruments or documents.
   v) PLAGIARISM - representing the words or ideas of another person or presenting someone else's words, ideas, artistry or data as one's own, or using one's own previously submitted work. Plagiarism includes but is not limited to copying another person's work (including unpublished material) without appropriate referencing, presenting someone else's opinions and theories as one's own, or working jointly on a project and then submitting it as one's own.

c) Academic Dishonesty cases are handled initially by the academic units, following the process outlined in the University's Academic Dishonesty Report Form, and will also be referred to SCCS for action under these rules.

Tutoring and Writing Assistance

NetTutor is a leading provider of online tutoring and learner support services fully staffed by experienced, trained and monitored tutors. Students connect to live tutors from any computer that has Internet access. NetTutor provides a virtual whiteboard that allows tutors and students to work on problems in a real time environment. They also have an online writing suite where tutors critique and return essays within 24 to 48 hours. Access NetTutor from within your Canvas class by clicking on the Tools button in your course menu.

The Oregon State Online Writing Suite is also available for students enrolled in Ecampus courses.

TurnItIn

Your instructor may ask you to submit one or more of your writings to Turnitin, a plagiarism prevention service. Your assignment content will be checked for potential plagiarism against

Internet sources, academic journal articles, and the papers of other OSU students, for common or borrowed content. Turnitin generates a report that highlights any potentially unoriginal text in your paper. The report may be submitted directly to your instructor or your instructor may elect to have you submit initial drafts through Turnitin, and you will receive the report allowing you the opportunity to make adjustments and ensure that all source material has been properly cited. Papers you submit through Turnitin for this or any class will be added to the OSU Turnitin database and may be checked against other OSU paper submissions. You will retain all rights to your written work. For further information, visit [Academic Integrity for Students: Turnitin – What is it?](#)

Student Evaluation of Courses
The online Student Evaluation of Teaching system opens to students during the week before finals and closes the Monday following the end of finals. Students receive notification, instructions and the link through their ONID. They may also log into the system via Online Services. Course evaluation results are extremely important and used to help improve courses and the online learning experience for future students. Responses are anonymous (unless a student chooses to "sign" their comments, agreeing to relinquish anonymity) and unavailable to instructors until after grades have been posted. The results of scaled questions and signed comments go to both the instructor and their unit head/supervisor. Anonymous (unsigned) comments go to the instructor only.