

CSCI 100: Introduction to Programming

Summer 2020 Syllabus

This course will introduce you to the field of computer science and the fundamentals of computer programming. CSCI 100 is specifically designed for students with no prior programming experience, and touches upon a variety of fundamental topics. This course uses Python to demonstrate those topics. The principles you learn here will be developed further as you progress through the computer science discipline.

Administrative

Instructor: Trish Duce | ducepa@mso.umt.edu | Social Science 412 | 406-370-9432

Teaching Assistant: TBD

Class: M,T,W,Th | 9am-11am | Social Science 362 | July 6th, 2020 – Aug 13th, 2020

Prerequisites: None.

Students will need to have access to a computer with the following:
(we can provide a laptop during class):

- Internet Browser with connection to the internet
- Python (<https://python.org>)

Website: Moodle (<http://umonline.umt.edu>)

Learning Outcomes

At the conclusion of this course, students will be able to:

1. Proficiently write, debug, and execute code in Python
2. Capture and use information in variables, perform calculations, and control program flow
3. Execute code in a command line environment
4. Programmatically extract, manipulate, and export data to and from external files
5. Integrate external libraries
6. Articulate the utility of a basic coding skillset in their domain

Tentative schedule:

Day	Lecture
1	CS: What and why
2	Introduction to Python 3
3	Variables and Expressions
4	Variables and Expressions
5	Types
6	Types
7	Exam 1
8	Branching
9	Branching
10	Loops
11	Loops Debugging
12	More Branching and Loops
13	Strings and Lists
14	Exam 2
15	Functions
16	Functions
17	Functions Debugging
18	Reading/Writing Files
19	Reading/Writing Files
20	Importing Modules
21	Command Line
22	Projects
23	Review
24	Final Exam

Grading

Attendance: (10%) Attendance is mandatory however I realize there are times when you must be absent. Please give me advance notice of any absences, and I will provide you with the same courtesy.

Homework: (45%)

Exams: (45%) 3 exams each worth 15%

Grading Scale

- 100-90 A, A-
- 89-80 B+, B, B-
- 79-70 C+, C, C-
- 69-60 D+, D, D-
- 59-and beyond F

P/NP – pass/no pass, 70 or greater is passing determined by Computer Science Department policy, which is a C or better.

Late Work Policy: Late work will NOT be accepted.

Academic Dishonesty

All students must practice academic honesty. Academic misconduct is subject to an academic penalty by the course instructor and/or a disciplinary sanction by the University. All students need to be familiar with the Student Conduct Code. The Code is available for review online at <http://www.umt.edu/student-affairs/community-standards/default.php>

Additional class policies and information:

If you miss a class, you and you alone are responsible for the material covered. This includes handouts, schedule changes, and lecture notes.

For important dates and deadlines related to classes, visit:

<http://catalog.umt.edu/academics/policies-procedures>

Also in the University catalog, review the policy on **incompletes**. In particular, note that incompletes can only be assigned when the student has “been in attendance and doing passing work up to three weeks before the end of the semester.” Incompletes will not be issued simply to prevent a failing grade.

Students with disabilities will receive reasonable modifications in this course. Your responsibilities are to request them from me with sufficient advance notice, and to be prepared to provide verification of disability and its impact from Disability Services for Students. Please speak with me after class or during my office hours to discuss the details. For more information, visit the Disability Services for Students website at <http://www.umt.edu/disability>.