

CSCI 135: Fundamentals of Computer Science

Fall 2019 Syllabus

This class is designed to give students a good general understanding of software development and logical reasoning. This course focuses on introducing general programming constructs using the Python programming language. This course will introduce all of the following concepts as well as provide a number of hands on opportunities to become proficient in using these tools.

- General Computing Concepts
- Logical Reasoning and Computational Thinking
- Programming Constructs
- Object Oriented Concepts

Administrative

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

Section 00:

- Class: MW 11am-11:50am, SS254
- Section 01 Lab: F 11am-11:50am SS344
- Section 02 Lab: R 9am-9:50am SS344

Section 10:

- Class: MW 2pm-2:50pm, SS344
- Section 11 Lab: T 11am-11:50am SS344
- Section 12 Lab: T 12:30pm-1:20pm SS344

Office hours: Tuesday & Thursday 10am-11am; or by appt

Teaching Assistant: Sarah Walling | sarah.walling@umconnect.umt.edu

Prerequisites: None.

Required Online Learning Subscription: (A subscription is \$77. Subscriptions will last until Jan 04, 2020.)

- Sign in or create an account at <https://learn.zybooks.com>
- Enter zyBook code: UMTCSCI135DuceFall2019
- Subscribe

Required Software:

- Internet Browser: Chrome (works well with zyBooks)
- Python (<https://python.org>)
- PyCharm (<https://www.jetbrains.com/pycharm>)

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

Learning Outcomes

Upon successful completion of this class, students will be able to:

1. Understand the basic components of a computer and how it works
2. Understand data types
3. Create graphical programs
4. Implement appropriate looping and control structures to solve problems
5. Create test cases for programs written
6. Read from files, iterate through the file and manipulate the data within the file
7. Analyze a problem, and identify and define the computing requirements appropriate to its solution
8. Use current techniques, skills, and tools necessary for computing practice

Grading

zyBooks: (15%)

zyBooks material is due before class starts.

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.

Labs: (15%)

The teaching assistant and I will give you as much help as needed to finish labs.

Homework: (15%)

The teaching assistant and I will give minimal help with homework. This is a chance for you to develop your problem solving skills. .

Exams: (45%)

There will be 2 midterms and 1 final exam. Each exam is 15% of your grade. The final exam will cover the entire semester.

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>.