



**COSC 1436 201CL**

**COSC 1336 201CL**

**Programming Fundamentals I, Spring 2023**

**January 18 - May 10, 2023**

**COM STEAM Building Room S1.146 7:30 pm–8:50 pm, MW**

**Instructor Information:**

**Name:** Joe Mills, M.S.

**Email:** jmills12@com.edu

**Contact phone:** 281-513-5919

**Office Location:** 323 – Adjunct Workroom

**Student Hours and Location:**

I will be available in-person 30 minutes prior to our Monday and Wednesday classes in room S1.146.

If you need an alternate time, please send me an email to schedule one-on-one time. Make sure you plan ahead and send an email at least 24 hours prior to the time you are requesting.

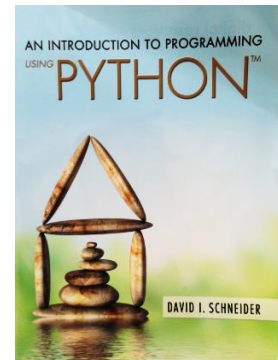
**Required Textbook/Materials:**

An Introduction to Programming Using Python™

David I. Schneider, University of Maryland

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ISBN-13: 9780134089454



The textbook is required. The textbook comes with an access code to MyProgrammingLab, which is a web-based tool that provides practice exercises and immediate feedback to the student. MyProgrammingLab will be used occasionally in the virtual classroom *but is not required*. Online versions of MyProgrammingLab usually do not have this access code. The website, title and course ID for MyProgrammingLab is documented at the beginning of this syllabus.

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A hardcopy textbook is recommended and is stocked in the bookstore. Throughout the course, you will regularly refer to specific sections and exercises in your textbook while writing software programs.

**Course Description:**

This course introduces the fundamental concepts of structured programming and provides a comprehensive introduction to programming for computer science and technology majors. Topics include software development methodology, data types, control structures, functions, data structures, and the mechanics of running, testing, and debugging software programs. This course assumes computer literacy. This course is included in the Associate of Science Degree for Computer Science , in

COM's Programming Certificate and in the Occupational Skills Award for SQL Server Database Fundamentals.

**Course Requirements:**

COSC 1436/1336 is designed as a lecture/lab course. Lecture will be delivered on campus each Monday and Wednesday during the semester.

Please download Python to your home computer from the website <http://www.python.org/download>. Python is open-source software and is free of charge. The Integrated Development Environment (IDLE) is also included in the download and is the tool we will use for this course.

**Determination of Course Grade/Detailed Grading Formula**

The grade is determined by the completion of the programming assignments, tests, and Blackboard Discussion assignments as described in the grading formula below.

COURSE ITEM	% of Total Grade
Chapter Assignments (typically 2 programs/assignments per week)	30%
Tests (3 tests, each worth 20% of total grade)	60%
Classroom / Brightspace Discussion	10%
<b>Total</b>	<b>100%</b>

Grading Scale	
Letter Grade	Percent
A	90% - 100%
B	80% - 89%
C	70% - 79%
D	60% - 69%
F	Below 60%

**Late Work, Make-Up, and Extra-Credit Policy:**

Homework must be completed on time. Due dates will not be extended. See the instructor if you have a documented emergency. Other than documented emergencies, no make-up work will be assignment. Further, extra-credit work is not a planned part of this course; therefore, it is imperative that you complete homework programming assignments, attend class regularly, and take all tests.

**Attendance Policy:**

Plan to attend all classes in S1.146 of the COM STEAM Building unless otherwise communicated. Course content delivery is in the classroom and through D2L Brightspace Learning Management System (LMS). Ten (10) percent of your grade is comprised of your attendance and participation in class. If you attend

all classes, actively participate in class, and complete assigned interactions in Brightspace, then you will most likely earn the full 10 percent for this portion of your grade.

**Communicating with your instructor:** ALL electronic communication with the instructor must be through your COM email. Due to FERPA restrictions, faculty cannot share any information about performance in the class through other electronic means. You may communicate with the instructor through email, phone and during student hours.

**Computer and Internet access:** Regarding problems with your own computer and with Internet access, COM is not responsible for outages, and due dates will not be extended.

Student Learner Outcome	Maps to Core Objective	Assessed by Assignment(s)
1. Describe how data are represented, manipulated, and stored in a computer.	Critical Thinking	Chapter 2 Programming Assignment
2. Categorize different programming languages and their uses.	Critical Thinking	Test 1
3. Understand and use the fundamental concepts of data types, structured programming, algorithmic design, and user interface design.	Empirical and Quantitative Skills	Test 1
4. Demonstrate a fundamental understanding of software development methodologies, including modular design, pseudo code, flow charting, structure charts, data types, control structures, functions, and arrays.	Critical Thinking	Chapter 3 Programming Project
5. Develop projects that utilize logical algorithms from specifications and requirements statements.	Empirical and Quantitative Skills	Chapter 4 Programming Project
6. Demonstrate appropriate design, coding, testing, and documenting of computer programs that implement project specifications and requirements.	Critical Thinking	Chapter 4 Programming Project
7. Apply computer programming concepts to new problems or situations.	Communication (written)	Chapter 6, Turtle Graphics Assignment

**Academic Dishonesty:**

Any incident of academic policy will be dealt with in accordance with COM policy and the Student Handbook. Academic dishonesty – such as cheating on exams is an extremely serious offense and will result in a grade of zero on that exam and the student will be referred to the Office of Student Conduct for the appropriate disciplinary action.

**Student Concerns:**

If you have any questions or concerns about any aspect of this course, please contact me using the contact information previously provided. If, after discussing your concern with me, you continue to have questions, please contact Mr. Leslie Richardson, Math and Computer Science Department Chair, at 409-933-8329, email lrichardson@com.edu.

**Course Outline**

Week	Due Date	Topic
1	1/16 - Holiday 1/18	1/16 – Campus Holiday in observance of MLK Jr Day Introduction and Syllabus Review. Chapter 1 – An Introduction to Computing and Problem Solving Downloading Python and Setting Up IDLE
2	1/23-1/25	Chapter 1 (continued) Programming logic
3	1/30-2/1	Chapter 2 -Variables, Input and Output Assignment statements, strings
4	2/6-2/8	Chapter 2 – Lists, printing and interactive input
5	2/13-2/15	Test Review on 2/13, <b>Test Number 1 on 2/15</b> . Covered are Chapters 1 and 2, emphasizing logic, variables, input and output, lists and list operations.
6	2/20-2/22	Chapter 3 - Structures that Control Flow
7	2/27-3/1	Chapter 3 (continued) ,
8	3/6-3/8	Chapter 4 – Functions
9	3/13-3/15	<b>Spring Break</b>
10	3/20-3/22	Chapter 4 – Functions (continued)
10	3/27-3/29	Test Review on 3/27, <b>Test Number 2</b> . Covered are Chapters 3 and 4, emphasizing control structures and functions
11	4/3-4/5	Chapter 5 – Processing Data
12	4/10-4/12	Chapter 5 – Processing Data (continued), Chapter 6 - Exception Handling, Random Values
13	4/17-4/19	Chapter 6 – Turtle Graphics
14	4/24-4/26	Chapter 7 – Classes
15	5/1-5/3	Chapter 7 - Classes
16	5/8-5/10	Test review on 5/8, <b>Test Number 3</b> , emphasizing classes, random values, turtle graphics.

**Institutional Policies and Guidelines**

**Grade Appeal Process:** Concerns about the accuracy of grades should first be discussed with the instructor. A request for a change of grade is a formal request and must be made within six months of the grade assignment. Directions for filing an appeal can be found in the student handbook [Student Handbook 2022-2023 v4.pdf \(com.edu\)](#). *An appeal will not be considered because of general dissatisfaction with a grade, penalty, or outcome of a course. Disagreement with the instructor’s*

*professional judgment of the quality of the student's work and performance is also not an admissible basis for a grade appeal.*

**Academic Success & Support Services:** College of the Mainland is committed to providing students the necessary support and tools for success in their college careers. Support is offered through our Tutoring Services, Library, Counseling, and through Student Services. Please discuss any concerns with your faculty or an advisor.

**ADA Statement:** Any student with a documented disability needing academic accommodations is requested to contact Kimberly Lachney at 409-933-8919 or [klachney@com.edu](mailto:klachney@com.edu). The Office of Services for Students with Disabilities is located in the Student Success Center.

**Textbook Purchasing Statement:** A student attending College of the Mainland is not under any obligation to purchase a textbook from the college-affiliated bookstore. The same textbook may also be available from an independent retailer, including an online retailer.

**Withdrawal Policy:** Students may withdraw from this course for any reason prior to the last eligible day for a "W" grade. Before withdrawing students should speak with the instructor and consult an advisor. Students are permitted to withdraw only six times during their college career by state law. The last date to withdraw from the 1<sup>st</sup> 8-week session is March 1. The last date to withdraw from the 16-week session is April 24. The last date to withdraw for the 2<sup>nd</sup> 8-week session is May 3.

**FN Grading:** The FN grade is issued in cases of *failure due to a lack of attendance*, as determined by the instructor. The FN grade may be issued for cases in which the student ceases or fails to attend class, submit assignments, or participate in required capacities, and for which the student has failed to withdraw. The issuing of the FN grade is at the discretion of the instructor. The last date of attendance should be documented for submission of an FN grade.

**Early Alert Program:** The Student Success Center at College of the Mainland has implemented an Early Alert Program because student success and retention are very important to us. I have been asked to refer students to the program throughout the semester if they are having difficulty completing assignments or have poor attendance. If you are referred to the Early Alert Program you will be contacted by someone in the Student Success Center who will schedule a meeting with you to see what assistance they can offer in order for you to meet your academic goals.

**Resources to Help with Stress:**

If you are experiencing stress or anxiety about your daily living needs including food, housing or just feel you could benefit from free resources to help you through a difficult time, please click here <https://www.com.edu/community-resource-center/>. College of the Mainland has partnered with free community resources to help you stay on track with your schoolwork, by addressing life issues that get in the way of doing your best in school. All services are private and confidential. You may also contact the Dean of Students office at [deanofstudents@com.edu](mailto:deanofstudents@com.edu) or [communityresources@com.edu](mailto:communityresources@com.edu).

**Changes to this Syllabus:**

The instructor reserves the right to make changes to this syllabus. All changes will be communicated to the students in a timely manner.