COSC 1436-101 HY, COSC 1436-102 HY

COSC 1336 -101HY, COSC 1336-102 HY

Programming Fundamentals I (Fall 2021), 8/23/2021 – 12/10/2021

Monday Lecture:

COSC 1436, 1336 101HY, Online with Blackboard Collaborate Ultra : 09:30 am–10:50 am
COSC 1436, 1336 102HY, Online with Blackboard Collaborate Ultra : 11:00 am–12:20 pm

Wednesday Lab:

COSC 1436, 1336, 101HY, STEAM classroom on first floor: S1.146, 09:30 am – 10:50 am
COSC 1436, 1336, 102HY, STEAM classroom on first floor: S1.146, 11:00 am – 12:20 pm

Instructor Information:

Name: Faith (Fay) Alexander
Email: fbryan@com.edu
Office phone: 409-933-8334 – If no answer, leave a message for a callback.
Office Location: STEAM 225.55

Student Hours and Location:

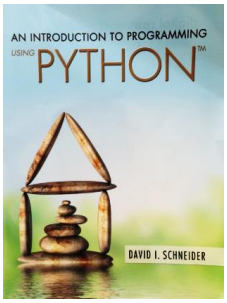
Monday,	9 – 9:30am, 12:30 – 1:30pm, and 3:30 – 4:00 pm, Blackboard Collaborate, virtual room for office hours
Tuesday,	9 – 9:30am and 1:30 – 3:30pm, Blackboard Collaborate, virtual room for office hours
Wednesday,	9 – 9:30am and 12:30 – 1:30 pm, STEAM 225.55
Thursday,	9 – 9:30am and 01:30 – 2:30 pm, STEAM 225.55

Other days and times are by appointment with the instructor.

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.

Required Textbook:

An Introduction to Programming Using Python™



David I. Schneider, University of Maryland

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. Online versions of MyProgrammingLab usually do not have this access code. The website, title and course ID for MyProgrammingLab will be documented in Blackboard.

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 Requirements:

COSC 1436/1336 is designed as a lecture/lab course. Lecture will be delivered virtually each Monday on Blackboard Collaborate Ultra. Labs are on Wednesday in the classroom. Both are required. If you cannot attend the live virtual session, you must watch the recording.

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.

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.

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	30%
Tests	60%
Blackboard Discussion Board	10%
Total	**100%**

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. There is no extra credit in this course.

Attendance Policy:

All students are expected to attend both the lecture and lab sessions. Lectures will not be repeated in the labs. Lecture delivery is through Blackboard Collaborate Ultra in a virtual classroom. The class session is recorded, so you must watch the video if you cannot make the class or if you would like a review.

The labs are for doing assignments according to what you learned in the lecture. Lecture information will not be repeated in the classroom. We will go directly into programming labs.

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.

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

Student Learner Outcome	Maps to Core Objective	Assessed by Assignment(s)
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 college 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	8/23-8/25	Introduction and Syllabus Review. Chapter 1 – An Introduction to Computing and Problem Solving Downloading Python and Setting Up IDLE
2	8/30-9/1	Chapter 1 (continued) Programming logic
3	9/6 is holiday; 9/8	Chapter 2 -Variables, Input and Output Assignment statements, strings
4	9/13-9/15	Chapter 2 – Lists, printing and interactive input
5	9/20-9/22	Test Review and Test Number 1. Covered are Chapters 1 and 2, emphasizing logic, variables, input and output, lists and list operations.
6	9/27-9/29	Chapter 3 - Structures that Control Flow
7	10/4-10/6	Chapter 3 (continued) ,
8	10/11-10/13	Chapter 4 - Functions
9	10/18-10/20	Chapter 4 – Functions (continued)
10	10/25-10/27	Test Review and Test Number 2. Covered are Chapters 3 and 4, emphasizing control structures and functions
11	11/1-11/3	Chapter 5 – Processing Data
12	11/8-11/10	Chapter 5 – Processing Data (continued), Chapter 6 - Exception Handling, Random Values
13	11/15-11/17	Chapter 6 – Turtle Graphics
14	11/22-11/24	Chapter 7 - Classes
15	11/29-12/1	Chapter 7 - Classes
16	12/6-12/8	Test Number 3, 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.<https://build.com.edu/uploads/sitecontent/files/student-services/Student_Handbook_2019-2020v5.pdf. *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.* https://build.com.edu/uploads/sitecontent/files/student-services/Student_Handbook_2019-2020v5.pdf

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 Holly Bankston at 409-933-8520 or hbankston@com.edu. The Office of Services for Students with Disabilities is located in the Student Success Center.

Counseling Statement: Any student needing counseling services is requested to please contact Holly Bankston in the student success center at 409-933-8520 or hbankston@com.edu. Counseling services are available on campus in the student center for free and students can also email counseling@com.edu to set up their appointment. Appointments are strongly encouraged; however, some concerns may be addressed on a walk-in basis.

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 1st 8-week session is October 6. The last date to withdraw from the 16-week session is November 19. The last date to withdraw for the 2nd 8-week session is December 2.

F_N Grading: The F_N grade is issued in cases of *failure due to a lack of attendance*, as determined by the instructor. The F_N 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 F_N grade is at the discretion of the instructor. The last date of attendance should be documented for submission of an F_N 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.

COVID-19 Statement: All students, faculty, and staff are expected to familiarize themselves with materials and information contained on the College of the Mainland's Coronavirus Information site at www.com.edu/coronavirus. In compliance with Governor Abbott's May 18 Executive Order, face coverings/masks will no longer be required on COM campus. Protocols and college signage are being updated. We will no longer enforce any COM protocol that requires face coverings. We continue to encourage all members of the COM community to distance when possible, use hygiene measures, and get vaccinated to protect against COVID-19. Please visit com.edu/coronavirus for future updates.

Updates to this Syllabus:
The instructor reserves the right to update this syllabus. All substantive changes will be communicated to students as soon as possible, through Blackboard announcements.