

COP1000C Syllabus

Course Name: Introduction to Computer Programming

Term and Session: Fall 2023 Session 1

Dates and Time: 08/21/2023 - 12/10/2023, T/TH 11 - 12:15

Location: Bldg # 13/ Room 105

Reference Number: 719439

Faculty Contact Information

Instructor Name: Sherry Cox

Email: Please contact me through the D2L email tool. Use my Broward College email only if you are unable to access the course email. My Broward College email is:

scox@broward.edu

BC Office Phone: 954-201-6319

Office Hours:

M/W 9 - 9:30, 2 - 3:30

T/R 9 - 11, 2 - 3

Remote Office Hours - Please make an appointment

Course Information

This is a 3-credit hour, live course with 2 live exams. In this class, you will engage in both live and online activities. These activities include, but are not limited to, readings, discussions, summative and formative assignments and quizzes, a project, a midterm and a final exam. See the course schedule for a detailed description. Students are responsible for regularly reviewing the course schedule and completing all required assignments, discussions, and assessments.

Course Description

This course provides the beginning programming student with the techniques necessary to write well-documented, structured computer programs. The course is intended to emphasize the planning process using examples involving sequence, selection, and iteration. The course is designed to promote good programming practices for further study of other programming languages

View the [course description](#) for more details.

Prerequisites and Corequisites

This class has no prerequisites and no corequisites.

General Course Outcomes

By the end of this course, the students will be able to:

- Describe the steps in the program development process, explain structured programming, and introduce algorithms using pseudo-code, flowcharts, or other graphical representations.
- Demonstrate an understanding of the common words and keywords used when writing pseudo-code; the Structure Theorem and the three basic control structures.
- Develop an understanding of the methods of analyzing a problem and developing a solution.
- Explain the selection control structure by introducing simple and multiple selection, nested selection, and case construct.
- Develop algorithms which use the repetition control structure in the form of DOWHILE, REPEATUNTIL, and counted repetition loops.
- Develop algorithms to several programming problems using combinations of sequence, selection, and repetition constructs.
- Develop an understanding of modularization as a means of dividing a problem into subtasks.
- Define elementary data items, data structures, the concepts of inter-module communication, local and global data, and the passing of parameters between modules.
- Develop an understanding of the concepts of module cohesion and coupling.
- Develop an understanding of the concepts of arrays, multi-dimensional arrays, records, arrays of records, and the algorithms that manipulate these data structures.

Specific Learning Outcomes

By the end of each of these units, the students will be able to:

- Define the steps in program development.
- Define structured programming.
- Explain simple algorithms written in pseudo-code, flowcharts, or other graphical representations.
- Write algorithms using pseudo-code, flowcharts, or other graphical representations.
- Define the Structure Theorem
- Define the problem.
- Design a solution algorithm using the sequence control structure.
- Check the solution algorithm.
- Define complex problems.
- Develop algorithms to solve complex problems.
- Define the selection control structures
- Write algorithms using selection
- Use the case structure
- Define complex problems.
- Develop algorithms to solve complex problems.
- Employ repetition in simple programs using the DOWHILE construct.
- Employ repetition in simple programs using the REPEATUNTIL construct.
- Employ count-controlled repetition constructs in simple programs.
- Define complex problems.
- Develop algorithms to solve complex problems.
- Define modularization.
- Create hierarchy charts or structure charts.
- Define the steps in modularization.
- Use program data.
- Define communication between modules.
- Use parameters in program design.
- Define object-oriented design.
- Define module cohesion.
- Define module coupling.
- Employ repetition in simple programs using the DOWHILE construct.
- Employ repetition in simple programs using the REPEATUNTIL construct.
- Define an array
- Define a multi-dimensional array
- Define a record
- Define an array of records

Textbook and Materials

This semester we are going to try to use a free online course through Cisco.

Cisco Skills For All

Free online coursework

<https://skillsforall.com/>

Step 1: Create an account and locate the Python Essentials 1 course

The free online content is divided into four modules:

1. **Module 1**
Introduction to Python and computer programming;
2. **Module 2**
Data types, variables, basic input-output operations, and basic operators;
3. **Module 3**
Boolean values, conditional execution, loops, lists and list processing, logical and bitwise operations;
4. **Module 4**
Functions, tuples, dictionaries, exceptions, and data processing.

We will also complete half of the Python Essentials 2 course:

The free online content is divided into four modules (but we will only complete the first 2):

1. **Module 1**
Modules, Packages, and PIP
2. **Module 2**
Strings, String and List Methods, Exceptions

In addition, this course utilizes the following required software:

Python 3.8 or newer

Download is available through the [Python website](#).

Detailed instructions can be found on the Unit 1 Module under Installing Python on Windows or Installing Python on a Mac.

In order for you to have the most effective learning environment, it is important that you are using the right equipment. For this course, you will need:

A reliable Internet connection.

- Regular access to a laptop or desktop computer with an updated operating system and web browser. Visit the technical requirements page for a complete list of system and software requirements. And the D2L System Check to ensure your browser is properly configured for online learning.
- Microsoft Office 365 is available for download for all Broward College students. Follow the [directions to download and access Microsoft 365](#).

- A webcam and microphone for proctored exams.

Reference Materials

All images used in this course are from [Flaticon](#) and [Pearson](#).

Student Expectations

Attendance Verification

You are expected to attend live class meetings and participate in an academic activity to be considered “present” in the course. You must complete 2 academic activities during the first week of the course, so that it is done before the attendance verification date. The academic activities are the syllabus quiz and discussion post. Just showing up, logging into the course, or sending an email to your instructor will not satisfy the attendance requirement. If you are reported for non-attendance in any course and then withdrawn, you are still responsible for paying for the course. If for any reason you cannot complete the attendance verification requirement before the deadline, make certain to drop the course by the official drop/add deadline or you will still have to pay for the course.

Participation

To succeed in this course, attend class regularly and log in and participate multiple times throughout the week (check email, announcements, class discussions, feedback, etc.) so you do not miss critical course information and updates. Additionally, communication with your professor is very important and plays a vital role in your success.

Withdrawal policy

It is your responsibility to withdraw from this course. If you stop participating and do not withdraw by the deadline, you may receive an F.

Computer Knowledge and Skills

Some of the skills that you will need at the beginning of the course include:

Working knowledge of how to use multiple web browsers (Chrome, Firefox, Safari, etc.) to navigate the Internet and locate information.

- sending and receiving email using your D2L email (within the online course) and your BC email address. You should only use your instructor’s BC email if you cannot access D2L.
- file management skills including downloading and saving files on your computer, uploading files to D2L, and sending email messages with attachments.

Class Activities

Discussions

Remember, discussions are public and everyone in your course can read what you post. Review the [D2L discussion tutorial](#) for general support with the discussion tool.

Discussion Expectations:

There are 3 discussions worth 25 points each.

- Original posts should be completed 2 days before the close of the discussion board.
- Original posts should be a MINIMUM of 8 sentences.
- Responses, if required, are to at least one classmate post and should be a minimum of 3 sentences.
- Refer to the discussion rubric for specific grading criteria.
- Grades will be posted within 5 days of the discussion due date.

Assignments

Assignments must be submitted by the due dates as specified in your syllabus. The submission of an assignment is your sole responsibility. You should keep an electronic copy of all assignments. Review the [D2L assignment tutorial](#) for general support with the assignment tool.

Assignment Expectations:

- There are 6 reading assignments (1 for each module of the free online book)
Worth 15 points each.
- There are 6 HW Assignments
Programming assignments completed on your own using Python
Worth 25 points each.
- There are 8 In Class Lab Assignments
Programming assignments completed by following along with the instructor using Python
Worth 15 points each.
- 1 final project worth 50 points
- See course schedule for assignment due dates.
- Refer to the assignment rubric and other assignment resources for grading criteria.
- Grades will be posted within 7 days of the assignment due date.

Quizzes & Tests

Quizzes and tests may be taken only during the availability dates as specified in the course schedule. Give yourself plenty of time to complete assessments and pay close attention to the

time limits. Make sure you have a reliable Internet connection prior to taking quizzes or tests. Review the [D2L quizzes & tests tutorial](#) for general support with quizzes and tests.

Quiz & Test Expectations:

There are 6 Tests in D2L (1 for each module) at 25 points each.

- You have 1 attempt at each test.
- Tests are taken using D2L Lock Down Browser.

Live Tests:

There will be 2 live tests (MUST BE IN CLASS) , a midterm and a final, given on the dates specified by the instructor

Late Work Policy

For this course, late work will be permitted with point deductions for everything except exams and the final project phase 3. Computer and Internet connectivity problems are not valid reasons for late work without penalty. It is the student's responsibility to be technologically prepared to submit from home.

Course Schedule

Read and refer to this section regularly. The submission of all work is the sole responsibility of the student. Students should plan their workloads accordingly and not wait until the last minute to meet deadlines. If you are unsure of a due date, contact your instructor for clarification.

Orientation

Read & Review Syllabus / Start Here Module

- Welcome to COP1000C
- Syllabus
- Set up online Cisco Skills For All account for free online material

Discussion

- Student Introductions

Assessment

- Syllabus Quiz

Review Student Toolbox Module

- All items within module

***All Orientation Modules Activities are due by 11:59 pm on Sunday August 27, 2023**

Module 1 - Introduction to Python and computer programming

Reading Assignment

- Module 1 -
1.0. Welcome to Python Essentials 1

Download and Install Python

Installing Python on Windows

- Installing Python on Mac

Assignments

- Reading Assignment PE1 - Module 1

Assessment

- PE1 Module 1 Test in D2L

***All Module1 Activities are due by 11:59 pm on Sunday August 27, 2023**

Module 2 - Data types, variables, basic input-output operations, and basic operators

2.1. Section 1 – The "Hello, World!" Program

2.2 Section 2 - Python literals

Introduction to Algorithms - not in skillsofrall free online course

Reading

- Module 2 - 2.1. Section 1 – The "Hello, World!" Program
- Module 2 - 2.2. Section 2 – Python literals
- Algorithm Material

Discussion

- Discussion 1

***Above assignments are due by 11:59 pm on Sunday September 3, 2023**

Module 2 - Data types, variables, basic input-output operations, and basic operators

2.3. Section 3 – Operators - data manipulation tools

2.4. Section 4 –Variables

Introduction to Pseudocode - not in skillsforall free online course

Reading

- Module 2 - 2.3. Section 3 – Operators - data manipulation tools
- Module 2 - 2.4. Section 4 –Variables
- Pseudocode Matieral

Assignments

- HW Assignment 1

***Above assignments are due by 11:59 pm on Sunday September 10, 2023**

Module 2 - Data types, variables, basic input-output operations, and basic operators

2.5. Section 5 – Comments

2.6 Section 6 –Interaction with the user

Reading

- Module 2 - 2.5. Section 3 –Comments
- Module 2 - 2.6. Section 4 –Interaction with the user

Assignments

- Reading Assignment PE1 - Module 2
- HW Assignment 2

Assessment

- PE1 Module 2 Test in D2L

***Above assignments are due by 11:59 pm on Sunday September 24, 2023**

Module 3 - Boolean values, conditional execution, loops, lists and list processing, logical and bitwise operations

3.1. Section 1 – Making Decisions in Python

Reading

- Module 3 - 3.1. Section 1 –Making Decisions in Python

Assignments

- HW Assignment 3

***Above assignments are due by 11:59 pm on Sunday October 8, 2023**

Midterm Exam

Review

- All HW to date
- Module 1 and 2, and section 1 of module 3

Assessment

- Midterm Exam

***Midterm Exam will be in class on Tuesday October 10, 2023**

Module 3 - Boolean values, conditional execution, loops, lists and list processing, logical and bitwise operations

3.2 Section 2 - Loops in Python

3.3 Section 3 - Logic and bit operations in Python

Reading

- Module 3 - Section 3.2 –Loops in Python
- Module 3 - Section 3.3 –Logic and bit operations in Python

Discussion

- Discussion 2

***Above assignments are due by 11:59 pm on Sunday October 15, 2023**

Module 3 - Boolean values, conditional execution, loops, lists and list processing, logical and bitwise operations

3.4 Section 4 – Lists

3.5 Section 5 – Sorting simple lists: the bubble sort algorithm

Reading

- Module 3 - 3.4 Section 4 – Lists
- Module 3 - 3.5 Section 5 – Sorting simple lists: the bubble sort algorithm

Assignments

- HW Assignment 4

***Above assignments are due by 11:59 pm on Sunday October 22, 2023**

Module 3 - Boolean values, conditional execution, loops, lists and list processing, logical and bitwise operations

3.6 Section 6 – Operations on lists

3.7 Section 7 – Lists in advanced applications

Reading

- Module 3 - 3.6 Section 6 – Operations on lists
- Module 3 - 3.7 Section 7 – Lists in advanced applications

Discussion

- Reading Assignment PE1 - Module 3
- Discussion 3

Assessment

- PE1 Module 3 Test in D2L

***Above assignments are due by 11:59 pm on Sunday October 29, 2023**

Module 4

4.1 Section 1 – Functions

4.2 Section 2 – How functions communicate with their environment

4.3 Section 3 – Returning a result from a function

4.4 Section 4 – Scopes in Python

Reading

- Module 4 - 4.1 Section 1 – Functions
- Module 4 - 4.2 Section 2 – How functions communicate with their environment
- Module 4 - 4.3 Section 3 – Returning a result from a function
- Module 4 - 4.4 Section 4 – Scopes in Python

***Above assignments are due by 11:59 pm on Sunday November 5, 2023**

Module 4

4.5 Section 5 – Creating multi-parameter functions

4.6 Section 6 – Tuples and dictionaries

4.7 Section 7 – Exceptions

Reading

- Module 4 - 4.5 Section 5 – Creating multi-parameter functions
- Module 4 - 4.6 Section 6 – Tuples and dictionaries
- Module 4 - 4.7 Section 7 – Exceptions

Assignments

- Reading Assignment PE1 - Module 4
- HW Assignment 5

Assessment

- PE1 - Module 4 Test in D2L

***Above assignments are due by 11:59 pm on Sunday November 12, 2023**

Python Essentials 2 -Module 1

- 1.1 Section 1 – Introduction to modules in Python**
- 1.2 Section 2 – Selected Python modules (math, random, platform)**
- 1.3 Section 3 – Modules and Packages**
- 1.4 Section 4 – Python Package Installer (PIP)**

Reading

- 1.1 Section 1 – Introduction to modules in Python
- 1.2 Section 2 – Selected Python modules (math, random, platform)
- 1.3 Section 3 – Modules and Packages
- 1.4 Section 4 – Python Package Installer (PIP)

Assignments

- Reading Assignment PE2 - Module 1
- HW Assignment 6

Assessment

- PE2 - Module 1 Test in D2L

***Above assignments are due by 11:59 pm on Sunday November 19, 2023**

Python Essentials 2 -Module 2

- 2.1 Section 1 – Characters and Strings vs. Computers**
- 2.2 Section 2 – The nature of strings in Python**
- 2.3 Section 3 – String Methods**
- 2.4 Section 4 – String in action**
- 2.5 Section 5 – Four simple programs**
- 2.6 Section 6 – Errors, the programmer's daily bread**
- 2.7 Section 7 – The anatomy of exceptions**
- 2.8 Section 8 – Useful exceptions**

Reading

- 2.1 Section 1 – Characters and Strings vs. Computers
- 2.2 Section 2 – The nature of strings in Python
- 2.3 Section 3 – String Methods
- 2.4 Section 4 – String in action
- 2.5 Section 5 – Four simple programs
- 2.6 Section 6 – Errors, the programmer's daily bread
- 2.7 Section 7 – The anatomy of exceptions
- 2.8 Section 8 – Useful exceptions

Assignments

- Reading Assignment PE2 - Module 2

Assessment

- PE2 - Module 2 Test in D2L

***Above assignments are due by 11:59 pm on Sunday December 3, 2023**

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Final Project / Final Exam

Assignments

- Final Project

Review

- All homework and in class labs

Assessment

- Final Exam

***Final Exam will be LIVE in class on Thursday December 7, 2023**

***Above assignments are due by 11:59 pm on Wednesday December 6, 2023**

Grades

Course Requirements	Number of items	Points for Each	Total Points Available	Percent of Final Grade
Syllabus Quiz	1	5	5	.5%
Student Introduction	1	5	5	.5%
Reading Assignments	6	15	90	10%
Module Tests	4	25	150	18%
HW Lab Assignments	6	25	150	18%
In Class Lab Assignments	8	15	120	14%
Discussions	3	25	75	9%
Final Project	1	50	50	6%
Midterm / Final Exam	2	100	200	24%
Total	32	-	845	100%

Grading Scale

Grades	Percentage
Grade = A	90 - 100%
Grade = B	80 - 89.9%
Grade = C	70 - 79.9%
Grade = D	60 - 69.9%
Grade = F	59.9 - 0.0 %

Communication and Faculty Response

Communication

During the semester, your communications concerning the course should be restricted to the D2L email. As mentioned earlier, do not send class related emails to the instructor's BC email address.

It is recommended that you post class-related questions in the discussion area called the Course Café. Other students may have the same questions as you or may even be able to answer your questions.

Netiquette

In all online communications, it is expected that students will follow the rules of online netiquette, a guideline for polite online behavior. Review some of the general [netiquette rules](#).

- Individuals who violate netiquette rules or engage in disruptive online behaviors, such as flaming (posting disrespectful or hostile comments), posting inappropriate comments, or shouting (posting messages using all capitals), may have their class access privileges revoked and/or they may be referred to the Dean of Student Affairs. Students who continue to engage in unacceptable online behavior even after being warned, may be permanently denied access to the class and/or may receive an F for the class.
- Don't use email short hand like ROTFLO (rolling on the floor laughing out loud), BTW (by the way), or text-style writing like R-U thinking, etc. Not everyone knows what these abbreviations mean. If you want to use emoticons (smileys) to convey feelings, stick with the basics happy :-) sad :-(or wink ;-). Others are less well-known and are subject to different interpretations. The idea is to be clear in your communications.
- Use discretion when posting and/or sending emails. Make sure to check spelling, punctuation, grammar, capitalization, and sentence structure.

Faculty Response

Class emails will be answered within 24-48 hours (Friday-Sunday emails will be answered on Monday). If you need information related to a test or assignment, plan ahead and submit your questions in advance of the due date. If for some reason the class communication tools are unavailable for more than 24 hours, the instructor will communicate with students (if necessary) via their BC email address. Once the semester has ended, and only if necessary, you may contact the faculty member using the instructor's email address.

Policies and Procedures

You are responsible for being familiar with all BC Online policies and procedures related to your activity in this course.

Academic Accommodations for Students with Disabilities

If you are requesting academic accommodations for this class, you must first register with Accessibility Resources, who will evaluate your request and determine eligibility. To contact Accessibility Resources either call 954-201-6527, or visit the accessibility page of [Broward College website](#). If approved, you will be provided with an Accommodation Plan that you must deliver to me electronically. Once received, we will discuss which accommodations you are requesting for this class, and in accordance with [Broward College policy 6Hx2-5.09](#) you will be provided with the appropriate accommodations. Students who wait until after completing the course, or an activity, to request accommodations should not expect any grade to be changed, or to be able to retake the course or activity.

Academic Honesty

When you log into D2L, you do so with the understanding and agreement that you will produce your own work, complete class assignments and discussions yourself, and take class exams, tests, or quizzes without the assistance of others. All academic work must be the result of your own thought, research, or self-expression. Academic misconduct includes, but is not limited to, the following:

Types of Academic Dishonesty:

Sharing Access or Passwords to D2L: Keep your username and password confidential.

- **Cheating:** Obtaining or attempting to obtain, or aiding another to obtain credit for work by dishonest or deceptive means.
- **Plagiarism:** Using the words or ideas of the original creator without attribution as if they were your own. Plagiarism ranges from copying someone else's work verbatim and elaborating on or altering someone else's work.
- **Self-Plagiarism:** Submitting or reusing parts of a previous paper without referencing source it was first submitted. This includes retaking a course and turning in previously submitted papers and data.
- **Unacceptable Collaboration:** Using answers, solutions, or ideas that are the results of collaboration without citing the fact of the collaboration.
- **Falsification of Data:** Making up or falsifying information and data. Examples include making up or altering data for an experiment or citing reference to sources you did not actually use.
- **Pay Services:** Employing an assignment writing service or having another person/student write the paper for you.

- **Enabling:** Aiding and abetting another student in an act of academic dishonesty. Examples include giving someone a paper to copy and/or allowing someone access to your account.
- **Unauthorized or Malicious Interference:** Deliberately interfering with the work or activities of another person on purpose to cause the other harm or irreparable damages.
- **Inappropriate Use of Course Materials:** Distributing materials in this class and on D2L, including the syllabus, exams, slides, handouts, study aids, and presentations, that may be protected by copyright and are provided solely for the educational use of students enrolled in this course. You are not permitted to redistribute them for purposes unapproved by the instructor; in particular, you are not permitted to post course materials, quiz or exam questions, or discussions on commercial websites. Unauthorized uses of course materials may be considered academic misconduct.

Online courses use tools such as Turnitin and Honorlock to deter and detect academic dishonesty.

In this course, the first time you are found being academically dishonest, you will receive a zero for the assignment. If you are found academically dishonest a second time, you will receive an F in the course. Academic dishonesty may result in further disciplinary action and/or a referral to the Dean of Student Affairs. For more information, refer to the [Student Code of Conduct Policy](#) and the Student Code of Conduct section located in the [Student Handbook](#).

Changes to the Syllabus

The instructor reserves the right to make changes to the class syllabus. The syllabus is a guide and every attempt is made to provide an accurate overview of the class. However, circumstances and events may make it necessary for the instructor to modify the syllabus during the semester. In the event changes become necessary, students will be notified through class email, the discussion board, and/or the announcements tool.

Safety, Security & Emergency Preparedness

Safety is everyone's responsibility, and it is essential that all members of the Broward College community familiarize themselves with various safety tools, resources, and procedures to remain safe both on and off campus. You are encouraged to visit the [Campus Safety & Security website](#) for a wealth of information and resources as it relates to safety at Broward College. Included on the website is a variety of information, videos, and resources on crime prevention, active shooter preparedness, how to report suspicious activity, [hurricane preparedness](#), services, and how to respond in an emergency. Campus Safety is available 24 hours a day, 7 days a week and can be reached by calling 954-201-HELP (4357).

In the event of a school closing, due to weather or other major events that might impact class schedules, the instructor will post an announcement and/or send an email indicating what changes, if any, the event will have on the course schedule and due dates.

Help Desk

If you need help using D2L:

click on D2L Support at Broward College,

- visit the [24/7 Help Desk](#) page for 24-hour technical assistance, or
- contact the BC Help Desk at 954-201-7521.