# Syllabus CIS-105-75: Introduction to Object-Oriented Programming Spring 2021

### **Course Description**

Introduction to Object-Oriented Programming introduces students to programming using object-oriented principles, such as objects, methods and inheritance to write programs. Students will learn how to create decision statements, loops, functions, lists, dictionaries, sets, objects and classes to construct algorithms and solve problems. Prerequisite: MAT-095 or MAT-099, plus eligibility for ENGL-101. Three credits. Three billable hours.

Course Start and End Dates: Monday, February 1, to Thursday, May 20

Location: Online using Canvas and MS Teams

**Professor:** Maria Burness

Office Location: Online using MS Teams

Email: mburness@carrollcc.edu Phone: 410-386-8526

**Student Hours:** Mondays and Wednesdays 12:00pm to 1:00pm using MS Teams

Other days/times by request/appointment

**Division Chair: Rob Brown** 

Email: rbrown@carrollcc.edu Phone: 410-386-8224

#### **Required Materials**

**Textbook:** Starting Out with Python by Tony Gaddis (4<sup>th</sup> edition); ISBN 978-0-13-4444321

Software: Python 3.9.1 (http://python.org/downloads)

#### **Course Objectives**

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

- 1. Use decision statements in a program (PG5).
- 2. Use loops to manipulate data (PG5).
- 3. Create, call and return data from classes and functions (PG5).
- 4. Read and or write data to a file (PG5).
- 5. Write code to handle program exceptions (PG2, PG5).
- 6. Create and use data storage structures such as lists, dictionaries, and sets (PG5).
- 7. Understand recursive algorithms and their use in problem solving (PG2).
- 8. Debug code by fixing syntax and logical errors (PG2).
- 9. Explain how a program works by going through the code line by line (GE1, PG1, PG2, PG4, PG5).

# **Attendance Policy**

Regular and timely engagement with the course material is necessary for you to successfully achieve the course objectives. For an asynchronous (ASYNC) class, reading Canvas announcements, responding to email, and completing all assignments by specified deadlines are expected. See Instructional Methods and Materials below for additional information.

# College Attendance Policy

# Refund, Withdrawal, and Audit Policy

The refund period ends Monday, February 8, at 7:00 pm in the Records Office or 11:59 p.m. via Lynx Portal/Student Planning. This is also the last day to withdraw without a W grade. The last day to withdraw with a W grade or to audit a class is Wednesday, April 7, at 7:00 pm. You must have an advisor's approval to withdraw.

A student wishing to withdraw from or audit some or all of their courses should understand that such withdrawal or audit is not effective until the student completes the withdrawal or audit process in writing by obtaining the appropriate form which is available from the Records Office. Audit approval is at the discretion of the professor.

To qualify for a refund, students must officially drop a course within the refund period.

### **Refund Policy and Dates**

# **College Email Policy**

All communications between students and faculty will use official college email accounts. It is expected that students will check their college email at least once per day.

# Make-Up Policy

No make-up assignments or deadline extensions will be given without prior arrangements. The student must contact the professor within 24 hours of a missed deadline. The professor may request documentation for an excused absence. The professor is under no obligation to extend a deadline or give a make-up assignment for an unexcused absence. Any make-up assignment may not be the same assignment originally given.

#### **Discussion Policy**

Discussion posts must be content-related and must use a positive and supportive tone. Any complaints, foul language, or general negativity will be deleted, and disciplinary action may be taken.

#### **Class Cancellations**

Asynchronous (ASYNC) classes are not affected by campus closings since they do not meet on regularly scheduled days at regularly scheduled times.

#### Instructional Methods and Materials

In an asynchronous online learning environment, you work on the course material on days and at times that work within your schedule (but you will still have defined deadlines for assignments and tests). Daily studying of the course materials and participation in Canvas are crucial to your success. Successful completion of this course will be extremely unlikely without excellent time management, motivation, self-discipline, and participation. Students must schedule and manage their time accordingly.

You need to schedule/plan time each week to complete class work. The amount of time you need to budget WEEKLY for this three-credit asynchronous class is approximately 10-13 hours per week [4 hours a week for 'seat time' (the equivalent amount of time you would be attending a face-to-face class) plus 6-9 hours a week for the required 'outside of class' work such as reading the textbook and completing assignments and quizzes (an equivalent amount of time regardless of the learning environment)].

## **Assignments and Grade Values**

Activity	Points
Participation (9 at 10 points each)	90
Quizzes (9 at 20 points each)	
Labs (8 at 50 points each)	
Final Exam (cumulative; 80 points for	100
questions/answers and 20 points	
for Python code)	
Total:	770

#### **Grading Policies**

#### **Participation**

Discussions/Reflection Journals

There will be a total of 9 participation grades, one per unit, at 10 points apiece. These will normally be due the same week as labs are due.

Discussions will be used in this course to facilitate some discussion amongst students. Some discussions will involve students looking up information on the web. Other discussions will involve students posting code, commenting on code or troubleshooting code. Finally, some discussions will have students commenting on a particular "hot topic" in technology and commenting on each other's post.

Reflection Journals will be used by students in this course as a way of documenting and reflecting on their learning. These are private to the individual and to the faculty member; no other student will be able to see what they wrote.

### Quizzes

There will be 9 quizzes for the semester, one per unit, at 20 points apiece. Quizzes will cover concepts, vocabulary, and code. They will predominantly be multiple choice, fill-in-the-blank, matching, and True/False in the construction of the questions however other formats may be used as well (for example – short answer). Each quiz will be 20 points. All quizzes will be completed in Canvas. Students will be allowed to use their notes and their textbook during each quiz; however, students cannot use another person's help during a quiz.

#### Labs

There will be 8 labs total for the course, one per unit except for the first unit. Labs are worth 50 points apiece, will primarily be problems to solve using coding techniques from the current chapter and prior chapters (course is cumulative in nature), and are intended to be more intensive than the quizzes as students will be using higher order thinking skills to read and understand the problems, design a solution, code the solution, and execute relevant Python code to accomplish the stated task(s) in the problem(s). Students will be expected to comment extensively in their code on what they are doing (more to come about this) and will be submitting code as a part of the assignment.

Any lab submitted late will have a 5-point reduction for each day late (including weekends). Everything submitted in Canvas for grading is due by 11:59 pm on the due date, as indicated by the syllabus.

#### **Final Exam**

The final exam is cumulative and will consist of two parts: question/answer and code. Additional information will be provided by the professor.

### **Extra Credit**

Extra credit may be offered in this class at the discretion of the professor. If offered, details will be provided in class.

### **Final Course Grades**

90 – 100%	A	70 – 76%	С
87 – 89%	B+	67 – 69%	D+
80 – 86%	В	60 – 66%	D
77 – 79%	C+	Below 60%	F

Students must earn a **60% or greater** in order to receive a passing grade for this course. Some programs or other courses may require a C or higher to progress.

#### **Resources to Assist Students**

#### **Technology Loaner Program**

This semester, Carroll will continue the Technology Loaner Program. If you need technology to complete your work (laptop, internet access, etc), you **MUST** fill out the survey to get instructions and guidelines regarding borrowing and pick-up.

Link to survey: https://www.surveymonkey.com/r/6J96SJF

#### **Student Hours**

Student hours are a great way to receive individual help from your professor!

#### **Code of Integrity for Academic and Behavioral Standards**

Carroll Community College has a <u>Code of Integrity for Academic and Behavioral Standards</u> to foster and promote a sense of respect and consideration of others uphold high standards of academic honesty and social conduct (see the College Catalog).

Cheating and plagiarism are serious offenses and will not be tolerated. It is expected that students complete their own work unless collaboration is expressly permitted by the professor.

# **Communicating Concerns**

If a student has a concern about this class, the student should first contact the professor. If the concern is not resolved by the professor, then the student should contact the Division Chair.

# **Food and Housing Insecurity**

When students face challenges securing food and/or housing, it can be difficult to learn. Any student in this situation, is encouraged to contact the Dean of Student Affairs at: studentaffairs@carrollcc.edu or 410-386-8408. If a student feels comfortable doing so, please also let the professor know, and the professor will do what he/she can to connect the student with appropriate resources. The Carroll campus offers various services and supports for students; know that students are not alone in dealing with these issues.

# **Additional Policies and Information**

The following policies are detailed in Canvas:

Inclement Weather Disability Services Title IX Compliance Carroll Food Locker

# **Course Schedule**

Provided as a separate document/file.