<u>Code</u>: COMP238 <u>Title</u>: Programming Using Python

<u>Institute</u>: STEM <u>Department</u>: Computer Science

Course Description: This course provides students with the necessary skills to develop interactive programs utilizing the Python programming language. This course is specifically intended for students who are interested in game development. Topics to be covered include programming constructs such as variables, control structures, strings, and functions. Additional topics include tuples, the use of objects, graphics, and sound. Students will actively learn these concepts through assigned projects that will revolve around simple game design.

Prerequisites: COMP126, COMP132

Corequisites: None

Prerequisites or Corequisites: None

Credits: 3 Lecture Hours: 3 Lab/Studio Hours: 0

### REQUIRED TEXTBOOK/MATERIALS:

**Text:** Guide to Programming with Python Thomson Course Technology 2008

Storage: A portable secondary storage media (USB/flash drive)

### **ADDITIONAL TIME REQUIREMENTS:**

The student should expect to spend at least 2 hours of time outside class for each hour in class. The Computer Science Main Lab is in room LAH 103 of Larrison Hall. Hours are posted on the outside door and on the Computer Science Website (http://sites.brookdalecc.edu/home/stem-institute/computer-science/computer-science-lab/).

### **COURSE LEARNING OUTCOMES:**

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

Develop a variety of applications utilizing the Python programming language..

#### **GRADING STANDARD**:

Midterm exam: 25% Final exam: 25%

Lab Assignments: 50%

To be considered acceptable, a lab must be free of all syntax and logic errors and must meet all of the requirements outlined by the problem statement. Labs must also meet documentation and style requirements as outlined by the instructor. The final grade requirements for the course will be:

### <u>GRADE</u>

### **REQUIREMENTS**

Α	Earn an average grade of 94 thru 100
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A- Earn an average grade of 90 thru 93

**B+** Earn an average grade of 87 thru 89

**B** Earn an average grade of 84 thru 86

**B-** Earn an average grade of 80 thru 83

**C+** Earn an average grade of 75 thru 79

C Earn an average grade of 70 thru 74

**D** Earn an average grade of 60 thru 69

F Earn an average grade below 60.

INC An incomplete (INC) may be assigned at the discretion of the course

faculty for students who have extraordinary circumstances of documented hardship or emergency. These students have been actively participating throughout the term and have completed a significant portion of the course in a satisfactory manner but approach the end of the term without completing all assignments. The following process should be followed: The student contacts the faculty with the appropriate documentation. The incomplete contract is completed by the faculty and must be signed by both faculty and student. Students will be notified by email to check their grades and to speak to their counselor about the impact of an incomplete. All course work should be completed by the twenty-first day after the end of the current semester or term, exclusive of official college closings. When a student completes the work satisfactorily, faculty will submit a change of grade. If work is not completed satisfactorily, the INC will be changed to an F by the registrar. Students will be notified by email. For the purpose of calculating

academic standing, the INC will be treated as an F. (College Grading System Regulation 5.0013R)

UNITS( or chapters): Each unit is comprised of objectives; specifically:

**Unit Objective:** Tells you what you will be able to do after successfully completing the unit. **Method of Evaluation:** Tells you the tools you should use for self-evaluation as well as those which will enable your instructor to evaluate your progress.

**Estimated Time to Achieve:** Gives you the approximate length of class time that you should allocate for completion of the unit.

**Learning Objectives:** Give you the details of each unit objective.

**Recommended Learning Experiences:** Tell you by what means you can complete the unit objective. These include – <u>Class Meetings</u>; your primary source of learning – <u>Text Assignments</u>; read material carefully – <u>Programming Assignments(labs)</u>; your implementation of material learned.

### **COURSE CONTENT:**

The 12 units comprising the course are:

<b>CHAPTER (UNIT)</b>	<u>TITLE</u>
1.	Introduction
2.	Variables and Data Types
3.	Control Structures
4.	Strings and Tuples
5.	Lists and Dictionaries
6.	Functions
7.	Files and Exception Handling
8.	Software Objects
9.	OOP
10.	GUI Development
11.	Graphics
12.	Sound

### **DEPARTMENT POLICIES**:

**Testing:** Students will be allowed to take each test only **one** time. There are **no retests**. If a student has a valid excused absence on the day of the test, the student must make arrangements with the instructor to make up the test. The exam must be taken within 10 days and will be graded for full credit. Saturdays and Sundays count as days when calculating the 10 day limit. If not taken within the 10 days, a grade of zero will be assigned to the test. Only one in class test may be missed. Any other test that is made up will only be eligible for a maximum grade of 70.

**Resubmitted assignments:** In the case that an assignment needs to be corrected, the assignment must be corrected and resubmitted for grading no later than 1 week from the original due date.

Late assignments: Labs are to be submitted on a timely basis. The instructor will assign due dates. No more than 25 percent of the total labs may be submitted during the last two weeks of the semester.

**Attendance:** Attendance is required every week. More than three absences will result in a failing grade.

**Addendums:** Individual Instructors may add additional requirements to this syllabus in written form (such as assignment due dates, cover sheets, class behavior, etc.).

**ACADEMIC VIOLATION:** The instructor of the course has the authority to give a course grade of **F** if the student submits the work of another person in a manner that represents the work as one's own, or knowingly permits one's work to be submitted by another person without the instructor's authorization. All computer work must be on your own portable storage device.

### **College Policies**:

As an academic institution, Brookdale facilitates the free exchange of ideas, upholds the virtues of civil discourse, and honors diverse perspectives informed by credible sources. Our College values all students and strives for inclusion and safety regardless of a student's disability, age, sex, gender identity, sexual orientation, race, ethnicity, country of origin, immigration status, religious affiliation, political orientation, socioeconomic standing, and veteran status. For additional information, support services, and engagement opportunities, please visit <a href="https://www.brookdalecc.edu/support">www.brookdalecc.edu/support</a>.

For information regarding:

- Brookdale's Academic Integrity Code
- ♦ Student Conduct Code
- ♦ Student Grade Appeal Process

Please refer to the **BCC STUDENT HANDBOOK AND BCC CATALOG**.

#### **NOTIFICATION FOR STUDENTS WITH DISABILITIES:**

Brookdale Community College offers reasonable accommodations and/or services to persons with disabilities. Students with disabilities who wish to self-identify must contact the Disabilities Services Office at 732-224-2730 (voice) or 732-842-4211 (TTY) to provide appropriate documentation of the disability, and request specific accommodations or services. If a student qualifies, reasonable accommodations and/or services, which are appropriate for the college level and are recommended in the documentation, can be approved.

## **ADDITIONAL SUPPORT/LABS**:

Academic Tutors are available in the Computer Science Open Lab located in LAH103.

#### **MENTAL HEALTH**:

- Mental Health Crisis Support: From a campus phone, dial 5555 or 732-224-2329 from an external line; off-hours calls will be forwarded to BCC police (2222 from a campus phone)
- Psychological Counseling Services: 732-224-2986 (to schedule an appointment during regular hours)

See Instructor addendum for specific information about specific class schedule and assignments, instructor information (hours, office, phone, and email), grading policy, etc.

The syllabus is intended to give student guidance in what may be covered during the semester and will be followed as closely as possible. However, the faculty member reserves the right to modify, supplement, and make changes as the need arises.