# CSC121-900 Python Programming

Spring 2019

# **Instructor Information**

Instructor: Baojie Zhang

Contact Information:bzhang@forsythtech.edu (preferred method) or (336) 757-3649

Student Hours:M/W 10:30am – 12:00pm; T/TH 10:00am – 11:00am Room 411 in TEC Building

Class Meeting Times and Location**:** M/W 1:00pm – 2:50pm TEC 435

Last day to complete Course Entry Assignment without being dropped**:** Tuesday 1/22/19

Last day to withdraw without penalty**:** Friday3/15/19

Skills Needed**:** None or list them

1. Use student email, BlackBoard
2. Understand basic computer literacy, such as file management
3. Keep up with due dates in this class as you would in a real job
4. Ability to retain learning of concepts from previous chapters as these tools will be required in programs later on in the course on other topics, and in the advanced course that follows this one

# **Materials Required**

Web Sites: Title of page and link

1. [BlackBoard](https://blackboard.forsythtech.edu/webapps/portal/execute/tabs/tabAction?tab_tab_group_id=_1_1) at <https://blackboard.forsythtech.edu/webapps/portal/execute/tabs/tabAction?tab_tab_group_id=_1_1>
2. [PyCharm Edu](https://www.jetbrains.com/pycharm-edu/download/#section=windows) at <https://www.jetbrains.com/pycharm-edu/download/#section=windows>

Access Codes**:**

Techlink and Blackboard sign-in, must download and install PyCharm to work off-site

Textbooks**:**

1. Fundamentals of Python First Programs, Kenneth A. Lambert, Cengage, ISBN 978-1-337-56009-2 (Required)
2. Starting out with Python, Fourth Edition Tony Gaddis, Pearson

ISBN 978-0-13-444432-1 (Recommended)

Software**:**

PyCharm Community with Python 3.x

# **Course Description**

Prerequisites: [CIS115 Introduction to Programming and Logic](https://www.forsythtech.edu/catalog/1819/course/CIS/115)

Corequisites: None

Course Description: This course introduces computer programming using the Python programming language. Emphasis is placed on common algorithms and programming principles utilizing the standard library distributed with Python. Upon completion, students should be able to design, code, test, and debug Python language programs.

# **Learning Outcomes**

After completion of this course:

* The student should be able to perform operations using data types and operators.
* The student should be able to construct and analyze code segments that use branching statements.
* The student should be able to construct and analyze code segments that perform iteration.
* The student should be able to construct and analyze code segments that perform console input and output.
* The student should be able to construct and analyze code segments that perform file input and output.
* The student should be able to document code segments using comments and document strings.
* The student should be able to construct and analyze code segments that include function definitions, call signatures, default values, return, def, and pass.
* The student should be able to analyze, detect, and fix code segments that have errors, syntax errors, logic errors, and runtime errors.
* The student should be able to perform basic operations using built-in and third-party modules, math, random, datetime, io, sys, os.path, times, turtle, tkinter, and snap.

Grade Distribution

| **Letter Grade** | **Final Number Grade** |
| --- | --- |
| A | 90-100 |
| B | 80-89 |
| C | 70-79 |
| D | 60-69 |
| F | 59 and below |

Final grades are determined through a weighted average of exams, lab assignments, homework, class participation, and attendance. Your final grade in the course will be based on the following:

| **Category** | **Weight to Final** |
| --- | --- |
| Course Entry Assignments(2) | 1% |
| Participation | 4% |
| Group Projects(4) | 10% |
| Assignments (15) | 40% |
| Individual Projects(2) | 20% |
| Tests (2) | 25% |
| Total | 100% |

# Assignment Submission, Late Work, and Extra Credit

## Assignment Submission

You are expected to keep up with all of your work and get it in on time. I know that there are outside issues including: Work, Home, Car, Bus, Family (Children, Spouses, and Parents), court (defendant, witness, or most commonly jury duty), Health Issues and more. But, **you have to get your work in by the due date**. Assignments will always be posted at least one week in advance. Don't wait until the last minute for anything.

This course has 5 contact hours according to the student handbook and in a different section it states you are also expected schedule at least 2 - 3 hours outside of class for every one hour in class in a seated section. This means that by signing up for this class you have given a commitment to spend 15-20 hours a week on this work for class.

**The due dates are the dates that are scheduled for the work to be DUE and turned in. Getting the work in by the due date is your responsibility.**

## Late Work/Makeup Work Acceptance

Assignments and projects can be submitted and accepted by the posted "**Last day to submit with 15% penalty**”. This is not a new due date but an extension with a 15% penalty. No work will be accepted after this date.

**No makeup or extension for both tests.** You must complete them by the posted dates for grading.

## Extra Credit

N/A

## Attendance Policy

Students are expected to attend classes on a regular basis. As stated in the Student Handbook, students must satisfy the instructor that they should be permitted to remain in a course and attend classes after incurring absences in excess of five lecture hours, three lab sessions, or three lecture hours and one lab session.

Students who miss four daytime classes may be dropped by your instructor. You need to attend the lectures or you will be dropped from the course.

[**Davis iTEC Center**](https://www.forsythtech.edu/about-us/davis-itec-cyber-security-center/) **Skills Lab** is also available on the main campus, on the fourth floor of Technology Building, room 403 for student use. You may bring your own device, checkout a tablet/laptop there, or use one of the several desktops to work on your school work individually or as a team. Please clock in and out of the lab during your time there.

Click [here](http://www.forsythtech.edu/syllabus/) for college-wide universal course policies and procedures and

See schedule on NEXT Page!!!

## Expected Course Schedule

| Week/Day | Date | Lecture | Assignments given to student | Assignment Due |
| --- | --- | --- | --- | --- |
| 1/Mon | 1/14/2019 | Initial Meeting/Module1\_1 | Download and install PyCharm | |
| 1/Wed | 1/16/2019 | Module1\_2 | Assignment 1 |  |
| 2/Mon | 1/21/2019 | No Class: Martin Luther King Holiday | | |
| 2/Wed | 1/23/2019 | Module1\_3 | Assignment 2 | Assignment 1 |
| 3/Mon | 1/28/2019 | Module1\_4 | Assignment 3 | Assignment 2 |
| 3/Wed | 1/30/2019 | Module1\_4 | Assignment 4 | Assignment 3 |
| 4/Mon | 2/4/2019 | Module1\_4 | Module 1 Group Project | |
| 4/Wed | 2/6/2019 | Module Review |  |  |
| 5/Mon | 2/11/2019 | Module2\_1 List and Tuples(1) |  | Assignment 4 |
| 5/Wed | 2/13/2019 | Module2\_1 List and Tuples(2) | Assignment 5 |  |
| 6/Mon | 2/18/2019 | Module 2\_2 Dictionaries and Sets(1) | Assignment 6 | Assignment 5 |
| 6/Wed | 2/20/2019 | Module 2\_2 Dictionaries and Sets(2) | Assignment 7 | Assignment 6 |
| 7/Mon | 2/25/2019 | Module 2 Review | Assignment 8 | Assignment 7 |
| 7/Wed | 2/27/2019 |  | Module 2 Group Project | |
| 8/Mon | 3/4/2019 | Module 3\_1 | Assignment 9 | Assignment 8 |
| 8/Wed | 3/6/2019 | Lab Day |  | Assignment 9 |
| 9/Mon | 3/11/2019 | Module 3\_2 | Assignment 10 |  |
| 9/Wed | 3/13/2019 | Module 3\_3 | Assignment 11 | Assignment 10 |
| 10/Mon | 3/18/2019 | No Class: Staff Planning Day | | |
| 10/Wed | 3/20/2019 | No Class: Spring Break | | |
| 11/Mon | 3/25/2019 | Module 3 Review | Module 3 Group Project , Assignment 11 | |
| 11/Wed | 3/27/2019 | Lab Day: Midterm Project | | |
| 12/Mon | 4/1/2019 | Module 4\_1 turtle | Assignment 12 |  |
| 12/Wed | 4/3/2019 | Module 4\_2 |  |  |
| 13/Mon | 4/8/2019 | Module 4\_2 | Assignment 13 | Assignment 12 |
| 13/Wed | 4/10/2019 | Module 4 Review | Module 4 Group Project | |
| 14/Mon | 4/15/2019 | Module 5\_1 | | Assignment 13 |
| 14/Wed | 4/17/2019 | Module 5\_1 | Assignment 14 |  |
| 15/Mon | 4/22/2019 | Module 5\_2 |  | Assignment 14 |
| 15/Wed | 4/24/2019 | Module 5 Review | Assignment 15 |  |
| 16/Mon | 4/29/2019 |  | Project 2 | Assignment 15 |
| 16/Wed | 5/1/2019 | Project 2 | Test 2 |  |
| 17/Mon | 5/6/2019 | Project 2 |  | Test 2, Project 2 |