Three Rivers
COMMUNITY COLLEGE

Syllabus CSC-K108

Introduction to Programming

FALL 2019

Course and Instructor Information

Course Title: Intermediate to Programming (CSC- K108)
Credits: 4
Format: On ground
Instructor: Soumyashree Sahoo
Location: B-227
Class: Tuesdays & Thursdays 2:00 pm – 3:15 pm and Lab on Thursdays 3:20 pm to 5:00 pm
Email: SSahoo@trcc.commnet.edu

All information is subject to change at any time. Check the course **Blackboard Learn** page for announcements and updates.

Course Materials

Required interactive textbook: Programming in Python with zyLabs, http://zybooks.com/

Instructions from the publisher, zyBooks, are as follows:

1. **Sign in or create an account at learn.zybooks.com**
2. **Enter zyBook code**

   COMMNETCSCK108SahooFall2019

3. **Subscribe**

Programming in Python with zyLabs is an interactive online textbook that is required for this course. As you move through the zyBook, you will complete Participation and Challenge Activities that will help you learn the material. The best way to learn programming is by doing, and the zyBook material, and assignments are selected accordingly. It is extremely important to keep up with the assigned readings during this course. The cost for the text is $77.

The interactive textbook will be used throughout the semester for content, concepts, lectures etc. Additional course materials including lecture notes, links, assignments, and handouts will be posted on this courses site within **Blackboard Learn**.

Required Software/Supplies

Unless otherwise stated, the course **Blackboard Learn** site is required for all assignment submissions.
Email or hard copy submission will not be accepted.

Homework Assignments generation:

- Microsoft Office Word 2003+

Suggested Software options:

- Python 3.7 w/ IDLE
  https://www.python.org/downloads/
- *A*naconda
  https://www.anaconda.com/distribution/

Steps and details of installation will be provided inside the course in **Blackboard Learn**.

Course Description

This course presents a broad introduction to computer science including computer design, programming, information processing and algorithmic problem solving. It is intended as a foundation for beginning computer science students and others seeking to use computers as a tool in business, engineering, science and other disciplines. In addition, this course provides an introduction to high level computer programming language. The student will learn to design, develop and implement programs to solve various data processing problems. Topics covered include control structures, functions and parameter passing, file I/O, and an introduction to arrays and structures. In the lab, the student will use the computer to create and run programs to solve problems discussed in the lecture portion.

Course Outline	
Weeks	**Topics and Reading Assignments**
Week 1	Introduction to Python3
Week 2	Variables and Expressions
Week 3	Datatypes
Week 4	Branching
Week 5	Loops
Week 6	Functions
Week 7	Strings
Week 8	Lists and dictionaries
Week 9	Classes
Week 10	Exceptions
Week 11	Modules

Week 12	Files
Week 13	Inheritance
Week 14	Recursion
Week 15	Plotting

Note: The foregoing course outline is subject to change as conditions warrant.

Course Objectives

1. To provide the student with a broad introduction to computer science including computer design, programming, information processing and algorithmic problem solving.
2. Upon successful completion of this course, the student will be able to:
   o Plan, design, code, test, and debug solutions to programming problems using the Java Programming language
   o Use variables of types built into the   language, operators, and library functions in their Programs
   o Use input and output streams to write interactive programs
   o Use relational expressions to accomplish selection, and loops to enable repetition in their programs.
   o Write their own methods, thus finding the solution of more complex problems, using the principle of breaking a large problem into smaller sub-problems

Course Requisites

1. **Attendance:** Students are expected to be punctual and responsible for all assigned text reading materials and any additional course content posted on the course Blackboard Learn site.
2. **Participation:** Active and positive class and online discussion participation is expected. A large part of the learning experience will come from discussion of problems and techniques presented in the reading, notes and from the homework assignments. Onsite/in- class is not the time to check your email, browse the web for your next purchase, or to play games.
3. **Reading:** All reading assignments should be completed prior to the onsite lab time.
4. **Assignments:** All assignments are to be your own work and are due by the date and time posted with the assignment on the course Blackboard Learn site.
5. **Homework:** Homework assignments will typically be assigned on a weekly basis. Homework assignments will generally consist of the various aspects of the reading and posted content concepts and/or related items.
   a. To receive full credit, assignments must meet all requirements and specifications, *and* must do so within the quality guidelines described in the assignment text and class discussions.
   b. It is recommended that individuals start working on a homework assignment as soon as it is released and ask questions several days before due if additional explanations are needed on a specific assignment.

6. **Electronic submission of assignments:** Written documentation and answers to questions pertaining to an assignment *must* be submitted using Microsoft Word 2003+ (.doc or .docx) formats unless otherwise specified.
   a. **All documentation, code, scripts, etc. shall be submitted electronically** using the appropriate course **Blackboard Learn** site assignment link.
   b. Remember, because clocks do not always match, you should be submitting your assignment at

least 15 minutes before it is due. Extenuating circumstances should be discussed with the instructor **prior to the due date**.

   c. It is the student's responsibility to check before the deadline that the files they have uploaded have been effectively submitted and are not unreadable or corrupted.
   d. Students should check that their files have been correctly submitted by downloading them and testing that they can open and/or run the files.
7. **Quizzes/Tests:** Quizzes covering the material in the reading, assignments, and/or our discussions may be unannounced, while tests will be announced and scheduled at least a week in advance.
8. The instructor reserves the right to change topics and dates accordingly as the semester progresses. All changes will be communicated in an appropriate manner (such as updates within **Blackboard Learn** site).

Course Evaluation

Course evaluation will be based on computer assignments, quizzes, frequent and meaningful participation in discussions, and the final project. The final grade for this course will be determined by the following percentages:

Reading Assignments	20%
Programming Assignments	50%
Final Project	30%

Reading Assignments: As explained above, zyBooks contains Participation and Challenge activities. Your effort on these exercises will be recorded within zyBooks and will be graded, counting 20% toward your overall grade. These reading assignments will be posted in BBLearn.

Programming Assignments: There are several class programming assignments that will be provided by me as we proceed through the course, that you must complete and submit to the zyBooks lab environment. (Detailed instructions will be given in the first lecture on how to do this.) They must be submitted by the due date posted in the assignment. It is generally recommended that you write your code in the installed software's environment (we'll discuss the Python software in the first lecture) or Anaconda and then copy your code into zyBooks. Writing your code in Python software first (instead of directly into zyBooks) will afford you the benefits that software provides when writing code. We'll talk about these benefits more in the course.

Course grades: Grades will be assigned as objectively as possible, according to the following scale (with plus or minus, as appropriate):

90 - 100%	A
80 - 89%	B
70 - 79%	C
60 - 69%	D
59% and Below	F

Withdrawing from the Course

A student who simply stops submitting work will receive the grade earned on that work, usually a failing grade. To receive a "W" grade instead, apply for a withdrawal by the updated Withdrawal date (will be discussed during class). A "W" will be entered on the student transcript. An "N" (implicit withdrawal) may be entered for a student that stops submitting work before 60% of the class is completed but it will still show up as an "F" on your transcript.

Academic Integrity

Students are expected to do their own work in this class. **Working together to better understand the material is acceptable. Submitting duplicate work is not** and will adversely affect the assignment grade. Example violations include but are not limited to:

- Copying or sharing a file or any portion of a file from another student.
- Sharing or allowing another student to copy your files or any portion of a file.
- Duplicating or distributing copies of licenses for software programs and/or services.

All exams, papers or reports submitted by you and that bears your name is presumed to be your own original work that has not previously been submitted for credit in another course unless you obtain prior written approval to do so from your professor.

If you are uncertain about the expectations for completing an assignment or taking a test or examination, be sure to seek clarification from your professor beforehand.

Finally, you should keep in mind that as a member of the Three Rivers Community College community, you are expected to demonstrate integrity in all of your academic endeavors and will be evaluated on your own merits. Please follow the link: https://www.trcc.commnet.edu/student-services/advising-and-counseling-center/academic-success/

Be proud of your academic accomplishments and help to protect and promote academic integrity. The consequences of cheating and academic dishonesty may include a formal discipline file, possible loss of financial scholarship or employment opportunities, and denial of admission to a four-year college.

Financial aid and scholarships

Whether you are a full-time or part-time student, you may qualify for financial aid to help bring down your college costs or cover them entirely. Financial aid can come from a variety of sources. You may qualify for one or more federal, state, institutional, or private programs. In addition, financial aid comes in different forms such as grants, work-study, loans, and scholarships. https://www.threerivers.edu/admissions/how-to-enroll/financial-aid-scholarships/

Students with Disabilities

If you are a student with a disability and believe you will need support services and/or accommodations for this class, please contact the Disabilities Support Services at TRCC. Please note that the instructor cannot provide accommodations based upon disability until the instructor has received an accommodation letter from the Disabilities Counselor.

Sexual Misconduct:

BOARD OF REGENTS FOR HIGHTER EDUCATION AND CONNECTICUT STATE COLLEGES AND UNIVERSITIES POLICY REGARDING SEXUAL MISCONDUCT REPORTING, SUPPORT SERVICES AND PROCESSES POLICY

Statement of Policy for Public Act No. 14-11: An Act Concerning Sexual Assault, Stalking and Intimate Partner Violence on Campus:

"The Board of Regents for Higher Education (BOR) in conjunction with the Connecticut State Colleges and Universities (CSCU) is committed to insuring that each member of every BOR governed college and university community has the opportunity to participate fully in the process of education free from acts of sexual misconduct, intimate partner violence and stalking. It is the intent of the BOR and each of its colleges or universities to provide safety, privacy and support to victims of sexual misconduct and intimate partner violence."

UNITED STATES DEPARTMENT OF EDUCATION AND OFFICE OF CIVIL RIGHTS TITLE IX STATEMENT OF POLICY:

"Title IX of the Education Amendments of 1972 (Title IX) prohibits discrimination based on sex in education programs and activities in federally funded schools at all levels. If any part of a school district or college receives any Federal funds for any purpose, all of the operations of the district or college are covered by Title IX.

Title IX protects students, employees, applicants for admission and employment, and other persons from all forms of sex discrimination, including discrimination based on gender identity or failure to conform to stereotypical notions of masculinity or femininity. All students (as well as other persons) at recipient institutions are protected by Title IX – regardless of their sex, sexual orientation, gender identity, part-or full-time status, disability, race, or national origin-in all aspects of a recipient's educational programs and activities."

Please refer to the following weblink: https://www.trcc.commnet.edu/student-services/sexual-misconduct-resources-and-education/services-title-ix-coordinator/