IDCE 302 – Python Programming

Lectures: Wednesday 9:00 – 11:50 am in JC 103
Labs: Friday 1:25 – 2:40 pm in JC 103

Instructor: Dr. Ylli Kellici
Office: 10 Hawthorne St., Room 34 Phone: 508-421-3805
Office hours: Thursday 12.30 – 2.30 pm or by appointment Email: ykellici@clarku.edu

Teaching Assistant: Zhuoyue Zhou
TA Office Hours: IDCE Room 42
Monday 11 – 12:30 and Thursday 11 – 12:30 Email: zhzhouou@clarku.edu

Course Overview
This course provides a general introduction to the Python programming language. Topics include the Python programming environment, elements of the language, basic data types, and concepts of classes and objects. Upon the completion of this course, students are expected to have a good understanding about Python programming and will be able to design and develop Python programs for scientific computing. This course is open to both graduate and undergraduate students, no programming background is required.

Course Objectives
- To get familiarized with Python's programming environment
- To understand the basic concepts of values, variables, expressions and statements
- To be able to write programs that make use of conditional and iterative execution.
- To practice with creating and manipulating lists, tuples and dictionaries
- To work with file reading, writing and processing

Required Textbook
How to Think Like a Computer Scientist, Learning with Python.
(http://www.greenteapress.com/thinkpython/thinkCSpy/thinkCSpy.pdf)

Attendance
Students are expected to attend both lectures and labs. Attendance will be taken for evaluation purpose. Please arrive for classes on time. Two late entries will be marked as one absence. If you need to miss a class for a religious holiday, illness, etc., please notify me as soon as possible. Class participation is strongly encouraged.

Classroom Etiquette
Students are expected to refrain from eating, sleeping, making or receiving phone calls, texting, and reading materials that are unrelated to the course (e.g. no facebooking) while the class and the lab are in session. Thanks!

Exam
All students are required to take a close-book exam at the end of the course. Missing the exam will result in a grade of 0 points. The only acceptable excuses for missing the exam are those related to serious personal illness, a family emergency, or official school business (or any other kinds of university-excused absences). The reason for the absence must be documented in writing from an appropriate source, such as your physician. If you must be absent when an examination is scheduled, let me know as early as possible.

Labs
Late lab assignments will be penalized at the rate of **20% per day**, beginning on the due date, and will not be accepted after five calendar days past the due date. The lab assignments must be electronically submitted on Moodle. If you will be unable to complete a lab in time due to a valid reason you must contact me as early as possible before the assignment is due.

Academic Hours
This course is worth 0.5 credits, and requires a total of 90 academic hours.
Lecture: (3 hours x 7 weeks) 21 hours
Reading and review: (3 hours x 7 weeks) 21 hours
Lab: (1.25 hours x 7 weeks) 8.75 hours
Assignment: (4 hours x 7 weeks) 28 hours
Preparation for final exam: (11.75 hours)

Academic Integrity
Academic integrity is constituted by the five core fundamental values of honesty, trust, fairness, respect and responsibility (see www.academicintegrity.org). Departures from academic integrity, including plagiarism, facilitation, forgery and falsification, may result in a warning or the loss of grades on an assignment or even the failure of a course. Students are responsible for familiarizing themselves with the regulations concerning academic integrity.

Unless otherwise stated, lab assignments must be completed independently and be a true reflection of the student's own efforts.

Evaluation

Lecture Participation:	10%
Lab Participation:	5%
Lab assignments:	40%
Final Exam:	45%

Grade

A+: 97 - 100%	**A:** 92 - 96%	**A-:** 88 - 91%
B+: 85 - 87%	**B:** 81 - 84%	**B-:** 78 - 80%
C+: 75 - 77%	**C:** 71 -74%	**C-:** 68 - 70%
D: 60 - 67%	**F:** < 60%	

Spring 2016		IDCE 302: Python Programming	
Week	Dates	Topic	Readings
1	1/20	Variables, Expressions, Statements, Functions	Ch. 1, 2, 3
2	1/27	Conditionals and Recursions	Ch. 4
3	2/3	Fruitful Functions	Ch. 5
4	2/10	Iterations, Strings	Ch. 6, 7
5	2/17	Lists, Tuples, Dictionaries	Ch. 8, 9, 10
6	2/24	Files and Exceptions	Ch. 11
7	3/2	Exam	