WEST LOS ANGELES COLLEGE
COURSE OVERVIEW (SYLLABUS) FOR
CS902 – Introduction to Computer Science

Instructor: Kenneth Taira
Ticket #: 9516
Semester: Summer 2014 Online Live Lecture Days/Hours: TBA
MoTuWeTh 8 a.m. – 10:15 a.m. in CE-103
Final Examination – Thursday 7/24/14
Office Hours: TBA and online
CCCConfer Office Hours TBA
Telephone: 562.44.TAIRA (562.448.2472)
Email Address: ktaira@gmail.com (please begin subject with "CS902")

Course Description

902 Introduction to Computer Science (3) CSU/UC (RPT3)
This course introduces students to fundamental concepts of computer science and programming. Applications will NOT be taught. Programming will be introduced with the PYTHON programming language. This class is intended for Computer Science, Engineering, Math and Science majors. It is a prerequisite for all CSIT programming classes and is acceptable as a prerequisite for application classes.

Course Prerequisites and Advisories

There are no prerequisite courses per se but students should:

- be able to manage files and folders on their computers; and
- be able use the Windows Clipping Tool to capture information on the screen and save them as images

Required Textbook and Materials

- USB 2 Blank Flash Drive (4 GB or larger) *This is really important because it takes 20-30 minutes to download files to a USB2 flash drive and many hours on a USB1 flash drive*
- Open Source Textbook will be provided
- A Windows computer with a good Internet connection (Macs can be used as well, but the USB software will not work)
- Headphones (or speakers), and microphone (or telephone) for use with web conferencing

Student Learning Outcomes

If you are successful in this class, you will:

- Student will be able to write computer programs using IF, FOR, WHILE, to solve various business problems.
- Understand how to logically plan and develop programs

Course Objectives

Students will learn fundamental concepts of computer programming and computer science. These principles include algorithm design, data types, parameter passing, program logic, program organization, and software design. Throughout the course students will use uniform modeling (UML), flowcharts and pseudocode to understand program logic and design. Students will use the PYTHON programming language to apply programming concepts. There are no pre-requisites but students are assumed to have some familiarity with the use of a computer. This course will not deal with applications, but will use computers to illustrate concepts of algorithm design and programming

Instructional Methods

This course will be taught using a variety of instructional methods including online lectures (via CCCConfer), videos, online tutorials, online programming tools, usb-based programming tools, online books, assignments, quizzes and graded online discussions. Face-to-face discussion sections and office hours will be held on Saturdays.

Online lectures will be broken down into 12-20 minute chunks.

Student Responsibilities

- Read Announcements
- Do Assignments
- Exams/Quizzes
- Projects

Attendance

Students are expected to participate in all classes for which they are registered. Students who are unable to participate in class regularly, regardless of the reason or circumstance, should withdraw from the class. Instructors may exclude a student from a class whenever a student is not participating on a regular basis.

Examples of regular participation may include:

- submitting/grading assignments (students/faculty)
- participating in discussions (students & faculty)
- responding to emails / phone calls (students & faculty)
- attendance at scheduled chats (students & faculty)
- adherence to scheduled events in the syllabus (students & faculty)
- logging into the virtual classroom, reviewing messages and responding to messages (students & faculty)
- Web conferences or other live events scheduled for the class (students & faculty)

Make-up Policy

An exam may be made up if there is a valid excuse (serious illness corroborated by a physician). A make-up exam must be scheduled within 12 hours of the actual exam in person, by phone or email.

Examinations and Grading

Your final course grade will consist of a composite of the following:

Homework and In-Class Assignments	45 %
Blogs, Discussion Participation	10 %
Quizzes	10%
Examinations	35%

Homework will be submitted and graded via the online via Etudes-NG site (http://myetudes.com), box.net, and possible another website or server.

Scores of examinations are normalized. In other words, the highest point score on an examination in a class becomes equivalent to 100% and other student scores are adjusted.

Extra credit work may be assigned by instructor.

Grading Scale

A (100%-87.5%), B(87.5%-77.5%), C(77.5%-65%), D(65%-59%), F(Below 59%)

First Day Drop Policy

This instructor reserves the right to drop no-shows after the first hour of the first class meeting if no prior arrangements were made for the absence.

Academic Honesty Policy

This instructor follows the West Los Angeles College policy on cheating and plagiarism. Cheating and plagiarism are violations of college policy and these policies are found in the Schedule of Classes." Any student unclear on the meaning of academic dishonesty and plagiarism should meet the instructor during office hours for clarification."

Activities that are considered to be CHEATING include, but are not limited to, the following: communication with another person during an exam, accessing materials electronic or otherwise without the instructors express permission. Violation of any of these rules (i.e. cheating) could result in a lowering of the exam grade or the course grade (e.g. a "Fail"), and the violator's name and student I.D. number will be sent, with a description of the violation, to the Division Chair and to the Dean of Instruction to be kept on record for future reference. The Dean of Student Activities may also be contacted for disciplinary action, if necessary.

Academic Integrity

The work you do and submit is expected to be the result of your effort ONLY. You may discuss the high level (general) solution of an assignment. However, cooperation should not result in one or more students having possession of any part of an assignment written by another student. Incidents of academic dishonesty or lack of integrity will be referred to the Dean of Instruction's Office.

Schedule of Classwork, Homework, Exams, and Other Activities

(Subject to Change)
Please see attached

Classroom and Campus Cleanliness

Please help us keep the classroom and campus grounds clean. No food or beverages, except for water, is permitted inside instructional classrooms /labs. Please use the receptacles to dispose of trash.

Issues or Complaints:

Please address any issues you may have that are relative to this course *with me, your instructor*, either in person during my office hours (see above), by e-mail, or by telephone as early in the semester as possible *(ktaira@gmail.com, Cell phone: 562-448-2472.)* If you and I cannot resolve the issue, I will refer you to the division chair, Anna Chiang, chianga@wlac.edu, 310-287.4200 x4253

CE 101 Student Computer Laboratory Hours

TBA
The Lab Manager, Laurent Phung can be reached at PhungL@wlac.edu

Disabled Students

All students with disabilities requiring accommodations are responsible for making arrangements in a timely manner through the The Office of Disabled Students Programs and Services (DSP&S) in HLRC 119.

Computer Science and Information Technology Department (http://www.wlac.edu/csit)

The CSIT Division offers numerous degrees and certificate options. For degree and certificate requirements, see the CSIT Division website at (http://www.wlac.edu/csit). We also offer courses to prepare you to take computer industry certification exams such as MSCE, A+, etc. There are also discount voucher for industry certification exams-under the section of frequently asked questions. Division announcements and scholarship information may be found there.

Orientation	Syllabus Review	
	Load Course Materials on USB Flash Drives	InteractivePython.org
	Why Learn Python	General Introduction
	Using the Etudes LMS	Read Learning Python Part 1
	Using CCCConfer	Chapters 1-3
	Using Windows Snipping Tool for Screen Captures	
	Signup for Free Online tutorials	
	Do Generation tutorial from Learning with Python, Interactive Edition	
	Signup for Python Anywhere Free Online Programming Environment	
	Run "Hello World" online	
	Using Portable Apps	
	Reading books from USB Flash Drive	
	Using Portable Dia for drawing flowcharts and diagrams	
	Running Python from USB Flash Drive	
	Running Pythonw from USB Flash Drive	
	Running IDLE IDE from USB Flash Drive	
	Running Stani's Python Editor (SPE)	
	Running Pyscripter IDE	
Week 1	General Basics - Machine Language; Assembly Language, Program Design	InteractivePython.org
	Overview of Programming Languages	Simple Python Data
	Problem Solving, Algorithms, Introduction to UML and Flow Charts	Read Learning Python Part II
	Python Basics	Chapters 4-6
	Debugging	Read Learning Python Part III
	Types of Programming Errors	Chapters 10-11
	Comments	
	Variables and Data Types	
	Variable Names and Key Words	
	Python Statements and Expressions	
	Python Operators and Operands	
	Python Input	
	Order of Operations	
Week 2	Boolean Logic	InteractivePython.org
	Decision Making - IF Statement	Python Turtle Graphics, Python Modules,
	Selection, For Loops	Functions, Selection
	Iteration	Read Learning Python Part III
	Turtle Graphics	Chapters 12-14
	Python Modules (random, math)	Read Learning Python Part IV
	Declaring Functions, Calling Functions	Chapters 16-20
	Passing Parameters Between Main Program and Funcions	Read Learning Python Part V
	Local vs Global Variables	Chapter 22-23
Week 3	More Iteration	InteractivePython.org
	For Loops	More About Iteration, Strings
	While Statements	Read Learning Python Part II
	2-Dimensional Iteraton	Chapter 7
	Strings	
	Operations on Strings	
Week 4	Lists, Tuples and Dictionaries	InteractivePython.org
	List Operations	Lists, Files, Dictionaries
	Recursion	Read Learning Python Part VII
	Files and Exceptions	Chapter 32
		Read Learning Python Part III
		Chapter 8-9
Week 5	Introduction to Objects and Classes	InteractivePython.org
	Introduction to Object Oriented Programming	Recursion, Defining Classes
		Read Learning Python Prt VI
		Chapters 25-26
Week 6	Web Forms and CGI-Scripting, TBA	
	Final Examination	