# <u>CS 115 Syllabus</u> Summer-2017 (Eight-Weeks)

**Instructor:** Tawfiq Salem **Email:** Tawfiq.salem@uky.edu

Office Location: Davis Marksbury Building, Lab 304 Course Web Page: <a href="http://www.cs.uky.edu/~salem/cs115">http://www.cs.uky.edu/~salem/cs115</a>

Lecture: MWF 9:10 am - 10:10 am In 243-MMRB

Labs: TR 9:10 am - 10:10 am In 103-RGAN

# **Course Description**

This course teaches introductory skills in computer programming using an object-oriented computer programming language. There is an emphasis on both the principles and practice of computer programming. This course covers principles of problem solving by computer and requires completion of a number of programming assignments. In this course, we use Python as a programming language.

# **Prerequisites:** None

### **Course Outcomes**

The goals or desired outcomes of this class are that the student will be able to:

- 1. To acquire an understanding of computer architecture and data representations (variables, representation of numbers and character strings)
- 2. To learn basic algorithmic problem-solving techniques (decision structures, loops, functions)
- 3. To be able to use and understand objects used in programming
- 4. To be able to design, document, implement and test solutions to programming problems

These outcomes are measured by programs, lab work, lab exams, and lecture exams.

#### **Required Course Materials**

**Required Textbook:** The textbook used is an online textbook and costs \$48. Go to **Zyante** and click on the Student link and create an account. Then get the zyBook with the code **UKYCS115Summer2017** and click Subscribe. We will use some of the book questions in the homework assignments.

**Software:** The main programming environment will be Python 3.x. This software is free and available from www.python.org. The software will be available on computers in many labs on campus and is available to all students in the class for free download. Make sure that you get version 3.x of Python, not version 2! See here for more details about Python. Apple Macintosh

computer owners, be especially careful! Your computer may already come with version 2.x. You still need to install Python 3.x.

A recommended IDE for Python is WingIDE 101. It is free. It does not crash as often as the IDE provided with the Python interpreter (IDLE). Here is the link to the page where you can download it. There are versions for Windows, Linux and OS X there. Be careful to get the 101 version of WingIDE - they also have professional and shareware versions which are not free.

### **Student Evaluation:**

Attendance and Class Participation	5 %
Lab Assignments	20%
Homework assignments (from zyBook, etc.)	5 %
Programming Assignments	20 %
Midterm lab exam	10 %
Final lab exam	10 %
Lecture Midterm Exam	15 %
Lecture Final Exam (Comprehensive)	15 %

### **Grading Scale:**

90-100 %	A
80-89 %	В
70-79 %	C
60-69 %	D
Below 60%	E

# **Lab assignments:**

This class has scheduled times for to come and practice in the computer lab (RGAN 103) with the instructor being present in the lab. Each lab will have a specific assignment which is posted on the class web page several days before the lab meets. You should work on the problem before the lab period. You may not get it finished, but at least you will know what the problem is and what questions you need to ask. You will definitely learn more in the lab than if you read the assignment beforehand. You need to do the following for each lab.

- A demonstration of the lab tasks must be completed **IN THE LAB** on or before the due date in order to get credit.
- After your demonstration in the lab, you must upload the assignment via CSPORTAL before you leave the lab this is your proof that you completed the lab successfully.
- Labs are for learning. DO NOT COPY ANOTHER STUDENT'S SOLUTION AND TURN IT IN AS YOURS.

# **Program Assignments:**

Programming assignments are different from lab assignments in that they are larger and more elaborate. Typically you will have two weeks to do one and turn it in. The Documentation Standard will not be adhered to strictly in lab assignments; it will be in programming assignments. Lab assignments are meant to give you practice writing small pieces of code. Programming assignments allow you to develop larger programs that require more thought and time.

Implementation of programming assignments are meant to be done by individuals.

### Watch the web page:

Check the class web page for important announcements. The labs, assignments, and lecture notes will be on the web page. Labs and assignments are also submitted electronically via <a href="#">CSportal</a> available from the web page.

### **Graded work:**

The grades for assignments and lab exams will be available via CSPORTAL. Make sure to keep electronic copies of labs and assignments in the event that something needs to be re-submitted. Inform the instructor immediately if you notice a discrepancy. It would be a good idea to keep everything at least until you receive your grades after the end of the semester in case there is a grade dispute.

#### **Attendance Policy:**

Students can be excused for University accepted 1) serious illness; 2) illness or death of family member; 3) University-related trips (S.R. 5.2.4.2.C); 4) major religious holidays; 5) other circumstances that the instructor finds to be "reasonable cause for nonattendance." It is the student's responsibility to contact the instructor regarding the nature of the absence (within 7 days of the absence), and the instructor retains the right to ask for proof. The instructor will confirm excused absences via email to the student.

Students anticipating an absence for a major religious holiday are responsible for notifying the instructor in writing of anticipated absences due to their observance of such holidays no later than the last day in the semester to add a class. Information regarding dates of major religious holidays may be obtained through the religious liaison, Mr. Jake Karnes (859-257-2754).

Students are expected to withdraw from the class if more than 20% of the classes scheduled for the semester are missed (excused or unexcused) per university policy.

### **Lecture Attendance:**

As described above, attendance is required in lecture for the class and participation grade.

### **Lab Attendance:**

Students must come to labs in order to demonstrate their lab assignments to their lab instructor. Although lab assignments can be completed and submitted on your own time, the lab session is intended for you to get help and demonstrate completed lab assignments to the Instructor. The demo counts as your grade for each lab assignment.

### **Cheating and Plagiarism:**

Students are expected to do their own work. Cheating and plagiarism are very serious academic offenses. Any occurrences will be dealt with according to the university policy. This policy allows for a minimum penalty of zero on an assignment AND a permanent record in the student's file. Repeat offenders (in ANY class) face increasing penalties with each offense. Students should know that plagiarism detection software is in use by the CS department. The software detects "likely cheaters". The course coordinator makes the final determination if cheating has actually occurred. It is not legitimate to get "help" from people outside the class if the "help" involves them writing the code instead of you writing it. You are allowed and encouraged to talk to tutors and Computer Science TAs for help. You may even seek the help of upper division students, but write your code yourself!

However, ask for help when it is needed. If something is not clear, ask questions. The lecturer has office hours. Use email to contact me. I always will try to answer the email promptly, but don't expect instant responses. It may take a day before I get back to you. So don't wait until the night before the due date to start assignments. When sending email, include "CS 115" in the subject. You can also get help from other students, but do not share your source code. Students turning in even similar source code will be considered cheaters. The plagiarism detection software will flag the student submissions if they contain similar code. Share your ideas, your talents, but not your code.

Working together with other students in the class is allowed, however, After you have figured out what to do, do it individually. Write your own code and comments.

DO NOT SHOW YOUR SOURCE CODE TO ANYONE. The work you turn in MUST be your OWN. See the university rules on plagiarism here.

You should plan on some things going wrong, usually something does: maybe the lab is closed that night for some reason, maybe the labs are all crowded, maybe the campus

network goes down, maybe the weather prevents you from getting to a computer, maybe your computer fails. We still expect the assignment working and in ON TIME.

<u>Accommodation:</u> If you have a documented disability that requires academic accommodations, please contact the course coordinator as soon as possible. In order to receive accommodations in this course, you must provide a Letter of Accommodation from the Disability Resource Center.

Withdrawing from the Course: If you decide to leave the class, please do the paperwork to do it officially. There is a date on the schedule past which you are not allowed to drop for academic reasons (last day to drop a course). We'd much rather give a W grade than an E. Don't just stop coming to class. You will get an E!

<u>Course changes:</u> All policies associated with this course are subject to revision. Reasonable notification will be provided to students prior to any major changes. Check the announcements section of the web page often to keep abreast of important changes.

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