## Course Information

Date Submitted: 1/10/2013

Current Prefix and Number:  CS - Computer Science ,  CS 115 - INTRO TO COMP PROGRMMING

Other Course:

Proposed Prefix and Number:

What type of change is being proposed?

> Major Change

Should this course be a UK Core Course?   No

## 1. General Information

a. Submitted by the College of:   College of Engineering

b. Department/Division:   Computer Science

c. Is there a change in 'ownership' of the course?   No

   If YES, what college/department will offer the course instead:   Select...

e. Contact Person

> Name:   Jerzy W. Jaromczyk
>
> Email:   jurek@cs.uky.edu
>
> Phone:   257-1186

   Responsible Faculty ID (if different from Contact)

> Name:
>
> Email:
>
> Phone:

f. Requested Effective Date

   Semester Following Approval: Yes  OR Effective Semester:

## 2. Designation and Description of Proposed Course

a. Current Distance Learning (DL) Status:   N/A

b. Full Title:   INTRODUCTION TO COMPUTER PROGRAMMING

   Proposed Title:   Same

c. Current Transcript Title:   INTRO TO COMP PROGRMMING

   Proposed Transcript Title:   Same

d. Current Cross-listing:   none

   Proposed – ADD Cross-listing :

   Proposed – REMOVE Cross-listing:

e. Current Meeting Patterns

   LECTURE:  2

   LABORATORY:  1

 Proposed Meeting Patterns

   LECTURE:  2

   LABORATORY:  2

f. Current Grading System:   ABC Letter Grade Scale

   Proposed Grading System:   PropGradingSys

g. Current number of credit hours:   3

   Proposed number of credit hours:   3

h. Currently, is this course repeatable for additional credit?   No

   Proposed to be repeatable for additional credit?   No

   If Yes: Maximum number of credit hours:

   If Yes: Will this course allow multiple registrations during the same semester?   No

2i. Current Course Description for Bulletin:   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. Covers principles of problem solving by computer and requires completion of a number of programming assignments. Lecture, 2 hours; lab, 1 hour per week.

   Proposed Course Description for Bulletin:   This course teaches introductory skills in computer programming using a high-level computer programming language. There is an emphasis on both the principles and practice of computer programming. Covers principles of problem solving by computer and requires completion of a number of programming assignments.

2j. Current Prerequisites, if any:   None

   Proposed Prerequisites, if any:   None

2k. Current Supplementary Teaching Component:

   Proposed Supplementary Teaching Component:

3.  Currently, is this course taught off campus?   No

   Proposed to be taught off campus?   No

   If YES, enter the off campus address:

4. Are significant changes in content/student learning outcomes of the course being proposed?   No

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If YES, explain and offer brief rational:

5a. Are there other depts. and/or pgms that could be affected by the proposed change?   Yes

   If YES, identify the depts. and/or pgms:   The course is taken by students in Math and some departments in College of Engineering.

5b. Will modifying this course result in a new requirement of ANY program?   No

   If YES, list the program(s) here:

6.  Check box if changed to 400G or 500:   No

## Distance Learning Form

Instructor Name:

Instructor Email:

Internet/Web-based:   No

Interactive Video:   No

Hybrid:   No

1.How does this course provide for timely and appropriate interaction between students and faculty and among students? Does the course syllabus conform to University Senate Syllabus Guidelines, specifically the Distance Learning Considerations?

2.How do you ensure that the experience for a DL student is comparable to that of a classroom-based student's experience? Aspects to explore: textbooks, course goals, assessment of student learning outcomes, etc.

3.How is the integrity of student work ensured? Please speak to aspects such as password-protected course portals, proctors for exams at interactive video sites; academic offense policy; etc.

4.Will offering this course via DL result in at least 25% or at least 50% (based on total credit hours required for completion) of a degree program being offered via any form of DL, as defined above?

If yes, which percentage, and which program(s)?

5.How are students taking the course via DL assured of equivalent access to student services, similar to that of a student taking the class in a traditional classroom setting?

6.How do course requirements ensure that students make appropriate use of learning resources?

7.Please explain specifically how access is provided to laboratories, facilities, and equipment appropriate to the course or program.

8.How are students informed of procedures for resolving technical complaints? Does the syllabus list the entities available to offer technical help with the delivery and/or receipt of the course, such as the Information Technology Customer Service Center (http://www.uky.edu/UKIT/)?

9.Will the course be delivered via services available through the Distance Learning Program (DLP) and the Academic Technology Group (ATL)?   NO

If no, explain how student enrolled in DL courses are able to use the technology employed, as well as how students will be provided with assistance in using said technology.

10. Does the syllabus contain all the required components?   NO

11. I, the instructor of record, have read and understood all of the university-level statements regarding DL.

Instructor Name:

SIGNATURE|KCROUCH|Kathryn F Crouch|Dept approval for ZCOURSE_CHANGE CS 115|20121022

SIGNATURE|KCROUCH|Kathryn F Crouch|College approval for ZCOURSE_CHANGE CS 115|20121022

SIGNATURE|JMETT2|Joanie Ett-Mims|Undergrad Council approval for ZCOURSE_CHANGE CS 115|20121022

# CS 115 INTRODUCTION TO COMPUTER PROGRAMMING (3)

**Instructor:** Computer Science Staff
**Office Address:** 102 Marksbury Building
**Email (contact):** jurek@cs.uky.edu,
calvert@cs.uky.edu
**Office Phone:** (859) 257-3961

**Office hours:** TBD

**Course Description:**
This course teaches introductory skills in computer programming using a high-level computer programming language. There is an emphasis on both the principles and practice of computer programming. Covers principles of problem solving by computer and requires completion of a number of programming assignments. Lecture, 2 hour per week; Lab, 2 hours per week.

**Credits:** 3

**Course goals and student learning outcomes:**
The goal of this course is to introduce standard approaches and programming conventions for solving computational problems, to design algorithms, and to implement programs to solve such problems using a modern, high-level programming language.
This course contributes to the following course-specific learning outcomes :
A successful student will
1. acquire an understanding of computer architecture and data representations (variables, representation of numbers and character strings)
2. learn basic algorithmic problem-solving techniques (decision structures, loops, functions)
3. be able to use and understand concept and constructs of a programming language
4. be able to design, document, implement and test solutions to programming problems

**Required Textbook:** The textbook used is a free online textbook available in interactivepython.org: "How to Think Like a Computer Scientist".

**Description of Course Activities and Assignments**
Course activities will consist of two hours of lectures and two hours of computer labs. Students' performance will be evaluated with homework, programming assignments, quizzes, two in-class and lab exams, and the final exam. Additionally, students will participate in in-class activities; cooperative learning.

**Sample Schedule:**

| W Lab | Lectures (TR) | F Lab |
|---|---|---|
| Informal Lab meeting | Syllabus, Chapter 1 (General Introduction) | No lab meetings |
| Lab 2 | Chapters 1 and 2 (General Introduction, Simple Python Data) | Lab 1 Introduction to Python, Knowledge Survey |
| Lab 3, Introduction to Testing | Chapter 2 (Simple Python Data) **Give Pgm 1** | Test Cases Program 1 |
| Design Program 1 | Chapter 3 (Python Turtle Graphics) | Lab 4 |
| Lab 5 | Chapters 3 and 4 (Python Graphics, Modules and Getting Help ) **Give Pgm 2** | Lab 6 |
| Test Cases Program 2 | Chapter 5 (Functions) | Lab 7 |
| Design Program 2 **Lecture Exam 1 Wed. 10/3 7:30 pm** | Review, Chapter 5 (Functions) **Give Pgm 3** | Practice Lab Test (Bonus!) |
| **Lab Exam 1** | Chapter 6 (Selection) | Lab 8 |
| Test Cases Program 3 | Chapters 6 and 7 (Selection, Iteration) | Lab 9 |
| Design Program 3 | Chapter 7 (Iteration) **Give Pgm 4** | Lab 10 |
| Lab 11 (date changed) | Chapter 8 (Strings), Review | Lab 12 (date changed) last day to get W |
| Test Cases Program 4 (date changed) **Lecture Exam 2, Wed. 11/7 7:30 pm** | Chapter 8 (Strings) | Lab 13 |
| Design Program 4 (date changed) | Chapter 10 (Files) **Give Pgm 5** | Test Cases Program 5 |
| Holiday | Chapter 9 (Lists) on Tuesday | Holiday |
| **Lab Exam 2** | Chapter 9 (Lists) | Design Program 5 |
| Lab 14 | Objects/OOP, C++, Review | Review (Bonus!) **Pgm 5 due Friday** |

## Student Evaluation

| | |
|---|---|
| Attendance at Lectures (Cooperative Learning and Quizzes) | 5% |
| Lab Attendance and Assignments | 10% |
| Programming Assignments | 35% |
| Two Written Exams during the semester | 20% |
| Lab Test 1 | 5% |
| Lab Test 2 | 5% |
| Final Exam (Comprehensive) | 20% |

**Grading scale:**

90-100% = A
80- 89% = B
70- 79% = C
60- 69% = D
0- 59% = E

## Exam Information

The two tests during the semester will be held on provided dates and the lab tests will be given during regularly scheduled lab sessions. Final exam is scheduled in the final week.; see the Academic Calendar.

## Mid-term Grade

Mid-term grades will be posted in myUK by the deadline established in the Academic Calendar (http://www.uky.edu/Registrar/AcademicCalendar.htm)

# Course Policies:

### Attendance Policy.

Attendance in lecture and lab activities, timely submission of assignments is required and counts for the final grade; see Student Evaluation above.

### Excused Absences:

Students need to notify the professor of absences prior to class when possible. S.R. 5.2.4.2 defines the following as acceptable reasons for excused absences: (a) serious illness, (b) illness or death of family member, (c) University-related trips, (d) major religious holidays, and (e) other circumstances found to fit "reasonable cause for nonattendance" by the professor.

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.


**Verification of Absences:**
Students may be asked to verify their absences in order for them to be considered excused. Senate Rule 5.2.4.2 states that faculty have the right to request "appropriate verification" when students claim an excused absence because of illness or death in the family. Appropriate notification of absences due to university-related trips is required prior to the absence.

**Academic Integrity:**
Per university policy, students shall not plagiarize, cheat, or falsify or misuse academic records. Students are expected to adhere to University policy on cheating and plagiarism in all courses.  The minimum penalty for a first offense is a zero on the assignment on which the offense occurred.  If the offense is considered severe or the student has other academic offenses on their record, more serious penalties, up to suspension from the university may be imposed.

Plagiarism and cheating are serious breaches of academic conduct.  Each student is advised to become familiar with the various forms of academic dishonesty as explained in the Code of Student Rights and Responsibilities.  Complete information can be found at the following website: http://www.uky.edu/Ombud.  A plea of ignorance is not acceptable as a defense against the charge of academic dishonesty. It is important that you review this information as all ideas borrowed from others need to be properly credited.

Part II of *Student Rights and Responsibilities* (available online http://www.uky.edu/StudentAffairs/Code/part2.html) states that all academic work, written or otherwise, submitted by students to their instructors or other academic supervisors, is expected to be the result of their own thought, research, or self-expression. In cases where students feel unsure about the question of plagiarism involving their own work, they are obliged to consult their instructors on the matter before submission.

When students submit work purporting to be their own, but which in any way borrows ideas, organization, wording or anything else from another source without appropriate acknowledgement of the fact, the students are guilty of plagiarism.  Plagiarism includes reproducing someone else's work, whether it be a published article, chapter of a book, a paper from a friend or some file, or something similar to this. Plagiarism also includes the practice of employing or allowing another person to alter or revise the work which a student submits as his/her own, whoever that other person may be.

Students may discuss assignments among themselves or with an instructor or tutor, but when the actual work is done, it must be done by the student, and the student alone. When a student's assignment involves research in outside sources of information, the student must carefully acknowledge exactly what, where and how he/she employed them.  If the words of someone else are used, the student must put quotation marks around the passage in question and add an appropriate indication of its origin. Making simple changes while leaving the organization, content and phraseology intact is plagiaristic.  However, nothing in these Rules shall apply to those ideas which are so generally and freely circulated as to be a part of the public domain (Section 6.3.1).

**Please note:**  Any assignment you turn in may be submitted to an electronic database to check for plagiarism.

**Accommodations due to disability:**
If you have a documented disability that requires academic accommodations, please see me as soon as possible during scheduled office hours. In order to receive accommodations in this course, you must provide me with a Letter of Accommodation from the Disability Resource Center (Room 2, Alumni Gym, 257-2754, email address: jkarnes@email.uky.edu) for coordination of campus disability services available to students with disabilities.