Syllabus ITEC 109: Problem Solving and Programming Fall 2014

Time, location, and website

9:00-9:50AM MW in 201 Davis Hall 9:30-10:20AM TR in 114 Davis Hall www.radford.edu/aaray

Professor

SorOffice HoursAndrew A. Ray Ph.D.B17 Davis Hallaaray@radford.eduM-F 11:00AM-12:00 PM

Overview

In this course you will learn how to use computers to solve problems. Not just simple memorize this formula and repeat it type of problems, but meaningful real life problems from the fields of game development, math, and business.

This is not a normal course, most of it is taught through active learning. Labs will teach you how to apply concepts using the python programming language, and how to use practical applications such as effects on pictures and sounds.

Course objectives

Students who successfully complete the course will:

- 1. Have a basic understanding of computer systems.
- 2. Demonstrate a working knowledge of a higher level programming language.
- 3. Create solutions to several problems by applying problem solving skills.
- 4. Use the code, test, and debug cycle to implement programs that realize the solutions from objective 3.

Book (Optional and available for free through Safari)

Introduction to Computing Using Python: An Application Development Focus **By:** Ljubomir Perkovic. **Publisher:** John Wiley & Sons

Grades

Points can be earned from homework (200 possible points), labs (56 possible points), attendance (28 possible points), and exams (375 possible points).

Letter	Points
А	594-660
В	528-593
С	463-527
D	396-462
F	0-395

Grading policies

- No late work is accepted. Do not ask for exemptions. This includes having a valid documented excuse.
- Exams may not be taken on a later date, even if you have a valid documented excuse.
- The harshness of the previous two policies is mitigated by this policy: You may choose to substitute a higher later grade for a lower earlier grade in the same category. This substitution can only be used ONCE. The categories are homework assignments and exams. For example, you could choose to have your second exam score count as your score for the first exam (which will be scaled accordingly), but you could not replace a low homework grade in addition to replacing the second exam score. This substitution must be made before the last day of class. It will not be automatically applied.
- If you miss the final exam, you fail the course.
- If you discover a grading error, you have two weeks from when the assignment was handed back to send an email to the professor explaining what the error is or why you think your answer should receive full credit. After two weeks your grade becomes final, no exceptions.

Attendance

You get one point for every class you attend. You may miss one class every three weeks without penalty.

General course policies

- Attendance is required. This is due to attendance being correlated with higher grades. If you could raise your grade by one letter just by attending class everyday, why wouldn't you want to attend class?
- The RU honor code is in effect for this course. Unless the assignment is a group project, all work you do is expected to be your own. All work pulled from non-course materials must be cited. These rules exist to ensure you are able to complete the course objectives by yourself. If you cannot do this and pass the class, you have harmed yourself and the institution.
- Classroom conduct: Respect your classmates and the professor. Turn cell phones off, **arrive on time**, no laptop/netbook/tablet usage in class, no loud food / drink, etc...

Special Assistance

If you are seeking academic accommodations under the Americans with Disabilities Act at Radford University, you are required to register with the Disability Resource Office (DRO). To receive academic accommodations for this class, please submit your documentation to the DRO in the lower level of Tyler Hall Suites 54-69, by fax to 540-831-6525, by email to <u>dro@radford.edu</u>. After submitting documentation to our office, you will set up an interview with a Disability Services Specialist to discuss accommodations. You will be notified via email once your accommodation package is complete and ready to be picked up. Once you have picked up your accommodation package, you will need to meet with each course professor during their office hours to review and discuss your package. For more information and/or for documentation guidelines, visit <u>www.radford.edu/dro</u> or call 540-831-6350