

CS 115 Introduction to Computer Programming Fall 2012

Course Description

Number of Credits: 3

This course is an introduction to algorithm design and implementation using a structured programming language (Python). There will be discussion of, and practice with, elementary programming techniques with emphasis on good style.

Further Course Information

"In the beginning was the Word, and the Word was with God, and the Word was God" (John 1:1)... and then sometime after that God created creatures who are also capable of speaking entire worlds into creation.

Class Schedules

Lectures: Thursdays 18:30-21:30 Labs: Mondays 19:30-20:45

There are no labs on Thanksgiving (Monday, October 8) or Remembrance Day (Monday, November 12)

Instructor Information

<u>Name</u>: Daniel Bidulock <u>Email</u>: dbidulock@ambrose.edu <u>Office</u>: L2098 <u>Hours</u>: email for appointment

Textbooks

<u>Required</u>: John Zelle "Python Programming: an Introduction to Computer Science", 2nd edition Franklin, Beedle & Associates (http://mcsp.wartburg.edu/zelle/python/)

Attendance

Students are unlikely to succeed in this course without regular class and lab attendance.

Course Outline

At a minimum, students can expect to receive instruction on the following topics:

- 1. Hardware, Software, and the Operating System
- 2. Operators and Elementary Logic
- 3. Data and its Interpretation
- 4. Decision Making
- 5. Loops
- 6. Functions
- 7. Data Structures
- 8. File I/O and Exceptions
- 9. Recursion
- 10. Object Oriented Programming

Expected Learning Outcomes

Upon successful completion of this course, students will possess the foundational knowledge necessary to pursue further academic or recreational study in the field of computer science.

Course Requirements

Students will be given five programming assignments and two exams. In terms of grading, the weight assigned to the assignments is light in comparison to that assigned to the midterm and final exams, from which the bulk of the final grade is calculated. This is done to prevent cheating, whether purposeful or accidental, and to emphasize the point that learning to program is not a passive exercise. Success in this course can only be achieved through the patient application of learned material and what may seem like endless, fruitless hours of trial and error.

Examinations:

<u>Midterm</u>: Thursday, October 11 at 18:30 in class <u>Final</u>: Thursday, December 6 at 18:30 in A2131

Grading:

Your final grade will be calculated as follows:

Assignments:	20%
Midterm Exam:	30%
Final Exam:	50%

The available letters for course grades are as follows:

<u>Letter Grade</u>	<u>Description</u>	
A+		95-100%
А	Excellent	89-94%
A-		84-88%
B+		79-83%
В	Good	74-78%
В-		70-73%
C+		66-69%
С	Satisfactory	61-65%
C-		57-60%
D+		54-56%
D	Minimal Pass	50-53%
F	Failure	0-49%

There will be five assignments issued over the course of the semester. The top four grades from each of these will be used in the calculation of the final grade. In order to receive an A+, a student's final score, which includes all five assignments, must meet or exceed 95%.

Because of the nature of the Alpha 4.00 system, there can be no uniform College-wide conversion scale. The relationship between raw scores (e.g. percentages) and the resultant letter grade will depend on the nature of the course and the instructor's assessment of the level of each class, compared to similar classes taught previously.

Please note that final grades will be available on the student portal. Printed grade sheets are no longer mailed out.

An appeal for change of grade on any course work must be made to the course instructor within one week of receiving notification of the grade. An appeal for change of final grade must be submitted to the Office of the Registrar in writing within 30 days of receiving notification of the final grade, providing the basis for appeal. A review fee of \$50.00 must accompany the appeal to review final grades. If the appeal is sustained, the fee will be refunded.

Important Notes/Dates:

The last day to enter a course without permission and /or voluntary withdrawal from a course without financial penalty (**drop**) – Sunday, September 16, 2012. These courses will not appear on the student's transcript. Courses should be added or dropped on the student portal by the deadline date.

Students may change the designation of any class from credit to audit, or drop out of the "audit" up to the "drop" date indicated above. After that date, the original status remains and the student is responsible for related fees. Please note that this is a **new policy**, that came into effect in the 2010-2011 academic year.

Withdrawal from courses after the Registration Revision period will not be eligible for tuition refund. The last day to voluntarily withdraw from a course without academic penalty (*withdraw*) – Monday, November 12, 2012. A grade of "W" will appear on the student's transcript.

Students wishing to withdraw from a course, but who fail to do so by the applicable date, will receive the grade earned in accordance with the course syllabus. A student obliged to withdraw from a course after the Withdrawal Deadline because of health or other reasons may apply to the Registrar for special consideration.

Other

<u>Recommended:</u> Douglas Adams, "The Hitchhiker's Guide to the Galaxy"

Electronic Etiquette

Students are expected to treat their instructor, guest speakers, and fellow students with respect. It is disruptive to the learning goals of a course or seminar and disrespectful to fellow students and the instructor to engage in electronically-enabled activities unrelated to the class during a class session. Please turn off all cell phones and other electronic devices during class. Laptops should be used for class-related purposes only. Please do not use iPods, MP3 players, or headphones. Do not text, read or send personal emails, go on Facebook or other social networks, search the internet, or play computer games during class. The professor has the right to disallow the student to use a laptop in future lectures and/or to ask a student to withdraw from the session if s/he does not comply with this policy. Repeat offenders will be directed to the Dean. If you are expecting communication due to an emergency, please speak with the professor before the class begins.

Academic Policies

It is the responsibility of all students to become familiar with and adhere to academic policies as stated in the Student Handbook and Academic Calendar. Personal information, that is information about an individual that may be used to identify that individual, may be collected as a requirement as part of taking this class. Any information collected will only be used and disclosed for the purpose for which the collection was intended. For further information contact the Privacy Compliance Officer at privacy@ambrose.edu.

Extensions

Although extensions to coursework in the semester are at the discretion of the instructor, students may not turn in coursework for evaluation after the last day of the scheduled final examination period unless they have received permission for a "Course Extension" from the Registrar's Office. Requests for course extensions or alternative examination time must be submitted to the Registrar's Office by the appropriate deadline (as listed in the Academic Calendar

http://www.ambrose.edu/publications/academiccalendar). Course extensions are only granted for serious issues that arise "due to circumstances beyond the student's control."

Academic Integrity

We are committed to fostering personal integrity and will not overlook breaches of integrity such as plagiarism and cheating. Academic dishonesty is taken seriously at Ambrose University College as it undermines our academic standards and affects the integrity of each member of our learning community. Any attempt to obtain credit for academic work through fraudulent, deceptive, or dishonest means is academic dishonesty. Plagiarism involves presenting someone else's ideas, words, or work as one's own. Plagiarism is fraud and theft, but plagiarism can also occur by accident when a student fails or forgets to give credit to another person's ideas or words. Plagiarism and cheating can result in a failing grade for an assignment, for the course, or immediate dismissal from the university college. Students are expected to be familiar with the policies in the current Academic Calendar and the Student Handbook that deal with plagiarism, cheating, and the penalties and procedures for dealing with these matters. All cases of academic dishonesty are reported to the Academic Dean and become part of the student's permanent record.

Students are strongly advised to retain this syllabus for their records.