A M B R O S E CS 115 INTRODUCTION TO PROGRAMMING (3)

Winter 2012

General Information

Instructor:	Dr. Bud Berges		
E-mail:	<u>bberges@ambrose.edu</u>		
Phone:			
Office:	TBA		
Office Hours	F	11:00 – 11:30 or by appointment	
Class Location:	A2145		
Class Meetings:			
Lecture:	W/F	9:45 - 11:00	
Tutorial:	W	11:15 – 12:30	

Text:

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

You are required to purchase the textbook or at least have easy access to a copy. It is your instructor's intention to use the book during some class/tutorial sessions. It can be purchased at the Ambrose University College bookstore. There are probably some used copies available from former students in the course.

The "Python" is freeware software, and it can be downloaded from the web site: <u>http://www.python.org/download/</u> (version 3.1.3)

Course Description (from the Ambrose online Academic Calendar)

CS 115 Introduction to Computer Programming (3-1) A

This course is an introduction to algorithm design and implementation using a structured programming language (C++). Discussion of, and practice with, elementary programming techniques with emphasis on good style.

Note: Credit may not be held for CS 115 and the former CS 200. Class limit of 15 students.

Attendance

Students are expected to attend all classes and laboratories for which they are registered. Unexcused absence may result in loss of marks or in additional assignments being required. Unexcused absences may lead to a penalty on the final grade. Where the student has been absent without permission or legitimate cause for more than one-quarter of the classes, an instructor may bar a student from writing the final examination in any course.

Course Requirements

While students are encouraged to assist each other, each student must create her or his own original solution to assignments, quizzes and exams. Duplicate submissions will result in students involved receiving a zero for the submission. Further penalties may be mandated. Late submission of labs and assignments may result in a penalty.

Grading Calculations

The weighting of graded components of the course is:

Lab and in-class assignments	20%
Mid-term and In-class tests	35%
Final Exam	40%
Professionalism and Attendance	5%

To achieve a particular grade in this class, refer to the table at the right.

Attendance

Students are expected to attend all classes and laboratories for which they are registered. Unexcused absence may result in loss of marks or in additional assignments being required. Unexcused absences may lead to a penalty on the final grade. Where the student has been absent without permission or legitimate cause for more than one-quarter of the classes, an instructor may bar a student from writing the final examination in any course

Percentage	Grade	Grade Point
95-100%	A+	4.0
89-94%	А	4.0
84-88%	A-	3.7
79-83%	B+	3.3
74-78%	В	3.0
70-73%	B-	2.7
66-69%	C+	2.3
61-65%	С	2.0
57-60%	C-	1.7
54-56%	D+	1.3
50-53%	D	1.0
0-49%	F	0.0

Cell Phones and other Electronic Aids

- Cell phones and other personal electronics must be turned off or set to ring silently during lecture and lab time and only essential calls may be accepted and will be taken so as to NOT disturb the class. This usually means an exit from the class room and library study area.
- Your own computer may be used for taking notes.
- Audio or video recording is NOT allowed except with permission of the instructor under exceptional circumstances.

Examinations

The exact schedule and coverage for the midterm test and the four quizzes will be announced in the class as the semester progresses. *The coverage may be modified from what is stated in this document.* The final examination will be held at a time and place scheduled by the Registrar, and will be three hours long. The midterm/in-class tests will be 75 minutes or 1.5 hours long.

Tentative Lecture Plan

This is a tentative plan. It may be modified as we proceed. For the updated class schedule wee Class_Schedule.docx. For a review of the material covered, see CS 115 Class_Schedule_Winter_2012.docx.

Week 1	Computers and Programs. Hardware and Software	CHAPTER 1
Week 2	My First Program, Computing with Numbers	Chapters 2, 3
Week 3	Computing with Numbers, Objects and Graphics	Chapters 3, 4
Week 4	Objects and Graphics	Chapters 4
Week 5	Objects and Graphics, Computing with Strings	Chapters 4, 5
Week 6	Computing with Strings , User Defined Functions	Chapters 5,6
Week 7	Decision Structures, Loop Structures and Boolean Expressions	Chapters 7, 8
Week 8	Decision Structures, Loop Structures and Boolean Expressions	Chapters 7, 8
Week 9	More Loops and Boolean Expressions Introduction to Simulation and Design	Chapters 8, 9
Week 10	Data Collections (Arrays)	Chapter 11.1, 11.2, Lecture Notes
Week 11-12	Algorithm Design and Recursion	Lecture Notes, Chapter 13 – selected paragraphs
Week 13	Course Review	