UMBC - 1000 Hilltop Circle, Baltimore, MD 21250

CMSC 331: Principles of Programming Languages

Summer 2012

Instructor: Mr. S. Lupoli Class Scheduled: TR 1-4pm @ ENG 104

Office: ITE 209 Office Hours: TR 12:30-1pm, or by appointment

Telephone: 440.455.3964 E-mail: slupoli@cs.umbc.edu

Textbook: Concepts of Programming Languages

Robert W. Sebesta, Addison Wesley, 2010.

ISBN: 978-0-13-607347-5

Course Description:

This course examines the semantics of programming languages. Topics include: history and fundamentals of programing languages, formal specifications of syntax and semantics; the implementation and execution of programs; and object-oriented, functional, and logic programming. Programming assignments and projects will provide experience in a number of languages. Prerequisites: CMSC 202.

Course Requirements:

- 1. Students are expected to read the chapter assignments prior to class and be prepared to discuss assigned topics in class.
- 2. Attendance is expected and students will be held responsible for all announcements and materials handed out during class. Attendance will be taken.
- 3. All Labs and Projects must be completed as assigned and submitted on the due date.
- 4. Examinations and tests must be taken as scheduled. If a student is unable to take an exam or a test, or an emergency arises, it is the responsibility of the student to contact the instructor prior to the scheduled time to arrange an alternate time. Documentation may be required.

Overall Course Objectives:

The key learning objectives for this course are:

- 1. To understand how programming languages have and continue to evolve
- 2. To learn about formal definition and specification of programming languages
- 3. To learn about different programming paradigms, and gain some experience in several
- 4. To study how programming languages are implemented
- 5. To experience new ideas that are appearing in programming languages

Grading:

Final Programming project	300 POINTS	*1	300
Homework	50 POINTS	* 12	600
Final	300 POINTS	* 1	300
	TOTAL		1200 POINTS

NOTE: Course assignments may be modified by instructor to meet the needs of the class

Overall Assignments Details

- Labs/Homework
 - o individual work, code will be checked for originality
 - o usually given one week to complete
 - o submitted through GL
- Projects
 - o 1st Project Group Effort

Attendance:

- Each student is expected to attend class regularly and punctually to obtain the maximum benefit from the class.
- Attendance will be taken at the **beginning** AND **end** of each class. (Lab OR Lecture)
- Students will be held responsible for all material covered in class.

Academic Honesty:

By enrolling in this course, each student assumes the responsibilities of an active participant in UMBC's scholarly community in which everyone's academic work and behavior are held to the highest standards of honesty. Cheating, fabrication, plagiarism, and helping others to commit these acts are all forms of academic dishonesty, and they are wrong. Academic misconduct could result in disciplinary action that may include, but is not limited to, suspension or dismissal. To read the full Student Academic Conduct Policy, consult the UMBC Student Handbook, the Faculty Handbook, or the UMBC Policies section of the UMBC Directory.

Academic dishonesty includes, but is not limited to:

- Cheating in any manner on a quiz or test.
- Sharing projects either partially or wholly (see **Your Assignment Must be Yours**)
- Copying solutions to assignments from the Internet

For a more complete description of academic dishonesty, refer to the <u>UMBC Undergraduate Student Academic Conduct Policy</u>.

Labs/Homeworks:

- 1. Labs are NOT accepted late.
- 2. Must be submitted using GL.
- 3. Must be your own work.

Cheating:

1st Offense – Receive no points on Project/Lab/Quiz/Test, notify department head

2nd Offense – Student is removed from class

3rd Offense - Possible expulsion

Class Website:

blackboard.umbc.edu

The website has nearly EVERYTHING we will cover in the class. Class Notes, projects, labs, dittos, etc... are all listed on the website. Make sure you click on the correct class link.

Final Grades:

Final grades will not be given out by the professor.

Class Timeline:

Tentative Course Schedule

Wk	Topics	
1	Introduction, Intro. to Grammars and Parse Trees (Syntax) Semantics/Intro. to PHP	
2	Lexical and Syntaxic Analysis Parsing	
3	Imperative Programming	
4	Functional Programming (Scheme)	
5	OOP Programming Logic Programming and Group Project	
6	Group Project and Final Exam	

NOTE: Course schedule may be modified by instructor to meet the needs of the class