# CS 6311 – Programming Languages I University of West Georgia, Spring 2008

Instructor:

## **Class meeting and instructor information**

Location:	TLC 1210
	MW 5:30p - 6:45p
Credits:	3
Prerequisites:	CS 5202 or equivalent

#### Duane Yoder

TLC 2215 dyoder@westga.edu 678-839-6658

## **Office hours**

Monday	9:00a	_	12:00p
	3:30p	_	5:00p
Tuesday	1:00p	_	3:00p
Wednesday	10:00a	_	12:00p
	3:30p	_	5:00p

\*You may also schedule an appointment or stop in anytime my door is open.

## **Online Content**

http://courses.cs.westga.edu Moodle key: developer

#### Text

There are no required textbooks for this course.

Recommended

<u>ACM Student Membership</u> – Student Digital Library Package A C# book for reference such as *C# Software Solutions: Foundations of Program Design* by John Lewis. Online books will be posted in Moodle.

## Software

- Microsoft Visual Studio 2005 You may obtain a copy for education use via the department's Microsoft Developer Network Academic Agreement. More info visit: <u>http://www.cs.westga.edu/Facilities/Software</u>
- TestDriven.NET v2.11.2177 Personal (<u>http://testdriven.net/</u>)

## **Catalog description**

The course will investigate theoretical and practical aspects of programming languages while improving programming and problem solving skills. Theoretical topics will include the analysis and evaluation of programming languages, while the practical aspect will focus on problem solving, defensive programming, and debugging techniques.

## **Course description**

This course will explore the basic programming constructs and practices employed in developing software. The course will study object-oriented programming, while focusing on programming-in-the-small issues such as problem solving, defensive programming, and debugging techniques.

## **Department learning objectives**

- Describe the characteristics of the major language paradigms.
- Compare and contrast compiled, hybrid, and interpreted program translation approaches, describing the phases and merits of each approach.
- Discuss language design issues such as orthogonality.
- Discuss issues related to programming-in-the-small vs. programming-in-the-large.
- Explain theoretical issues such as binding, type checking, scope, etc.
- Demonstrate the difference between various parameter-passing mechanisms.
- Incorporate exception handling into program.
- Analyze a problem statement and produce specifications and working code.
- Use incremental, iterative development in program development.
- Use a development environment to code and debug a software program.
- Apply object-oriented techniques such as abstraction, inheritance, and polymorphism in developing software.

## Topics

- Basic program development
- Object-oriented development
- Testing
- Defensive development
- IO
- GUI development
- Parameter-passing mechanisms

#### Grading

Assignments	50%
Quizzes	10%
Exams (Exam 1 20% Exam 2 20%)	40%
Extra credit	0%

## Assignments

Assignments may be written and/or programming oriented. All written assignments must be typed. The written assignments must be submitted as a Microsoft Word document via Moodle unless otherwise specified.

You may discuss the assignments with the instructor and others in the class. However, do not look at or copy another student's solutions when writing your solutions or code. All work must be your own, unless otherwise stated. I am not concerned with how you come

to understand the material, but once you obtain the understanding, you must provide your own solutions. Assignments where cheating has been determined will receive a zero and possible dismissal from the course and university – see Academic Honesty below.

There will be a several programming assignments in this class. The grade on your program will be based on more than just the functionality of the program. The readability and style of your program will also be a factor in the assigned grade.

#### Quizzes

Quizzes will be given on a regular basis (approximately one every two weeks). The lowest quiz score will be dropped. There will be no makeup quizzes. All quizzes will be announced beforehand.

#### Exams

The two exams will be announced at least two weeks in advance. If you miss a test for a legitimate reason, that you inform the instructor of at least two weeks beforehand, I will gladly give you a makeup. If you miss a test without a legitimate reason then you will receive a zero. Please do not be offended if I ask for documentation for an excused absence.

#### Late work

All assignments are due at the scheduled time. I do NOT accept late work.

#### **Academic** Honesty

All work, unless otherwise noted, must be done individually. Do not use the work of others or let someone else use your work. You will receive an F for the course if you cheat, whether you are the source or the user of the shared work. The incident will also be reported to the Office of Student Affairs so that they can determine if further disciplinary action is warranted.

## **Special Needs**

Any student sanctioned by the office of Disability Services must have a Student Disability Report and a Disabled Student Handbook available to share with the Faculty before any graded work is determined as to have made as appropriate arrangements as needed. For more information, please visit <u>http://www.westga.edu/~dserve/menu.html</u>.