## MIDSTATE COLLEGE 411 W NORTHMOOR RD PEORIA, IL 61614

(309) 692-4092 or (800) 251-4299

### **Fall 2010**

Course: CIS290 – Object-Oriented Programming Credit Hours: 4 quarter hours

**Method of Delivery:** Classroom M 6:00 – 9:30 pm

**Course Description:** Students will expand their knowledge of object-oriented programming techniques. Topics will include class methods and reusing classes, function templates and class templates, and stream input and output. An introduction to Microsoft Foundation Classes is also included in this course.

**Prerequisite:** CIS113 – Introduction to Programming.

Textbook: An Introduction to Object-Oriented Programming with Java, 5th Edition, 2010, McGraw

Hill. Author: C Thomas Wu. ISBN-13: 9-780-073-52330-9.

Materials needed for this course: Textbook plus the free hardware and software in Midstate's labs.

**Learning Objectives:** Upon completion of this course, the student will be able to:

- 1) Create object-oriented programs in Java, C++, or C#
- 2) Use encapsulation to properly hide data and achieve cohesion
- 3) Utilize polymorphism to elegantly handle different types of functional inputs
- 4) Utilize inheritance to leverage the attributes and methods of existing classes
- 5) Describe and utilize other object-oriented concepts such as abstraction, collaborations, interfaces, and coupling

**Grading Scale:** 90-100: A 70-79: C 0-59: F

80-89 : B 60-69: D

## **Midstate Plagiarism Policy:**

Plagiarism is using another person's words without giving credit to the author. Original speeches, publications, and artistic creations are sources for research. If students use the author's words in a paper or assignment, they must acknowledge the source. Plagiarism is strictly against the academic policy of the college and is grounds for failing the course. If repeated, plagiarism may result in suspension from the college. (See the Midstate College catalog and/or Student Handbook for additional information.)

In courses containing writing assignments, the college promotes the use of an electronic resource which compares the student's writing against previously submitted papers, journals, periodicals, books, and web pages. Students and instructors can use this service to reduce the incidence of plagiarism. This electronic resource has been found to conform to legal requirements for fair use and student confidentiality. It is able to provide a report to the student indicating the parts of the assignment that match.

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#### **Instructor:**

• Ramez Abi-Akar, CIS/MIS Director

• Office: 1220 Phone: (309) 692-4092 x 1220

 Email: <u>rabiakar@midstate.edu</u>
 Office Hours: M: 5:30 – 6:00 pm TWT: 2:00 – 3:00 pm

## Policies and procedures:

- 1. Classroom activities are reinforced with homework and tests for learning efficiency. Students should expect a quiz, a test or a homework assignment on every chapter.
- 2. Homework assignments will be given to apply the concepts learned from lectures and textbook. Quizzes and exams will be given to assess student comprehension of the material.
- 3. In order to keep up with the class material, all class activities have to be completed in indicated times. Homework assignments, in particular, are due at the beginning of the class period; otherwise, they will be considered late. Late homework get 10% penalty per class period.
- 4. All homework is to be labeled with your name, date, and topic.

#### Class attendance:

Regular class attendance is highly expected. No more than 15% absence will be tolerated. It is the student's responsibility to notify the instructor ahead of time when a class will be missed. If you know of a time conflict to occur, turn in your homework early. If the instructor receives no call or email half an hour before the missed class period, the student would be considered absent and no makeup would be allowed for that day. Makeup exams will only be given in case of extreme, fully-reasonable situations. No makeup work is accepted during the final week of the term.

#### **Grading scale:**

The term grade will be based on the following grading scale:

0	Homework, programming assignments and quizzes	45%
0	Midterm and final exams	45%
0	Class participation	10%

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# **Course Schedule:**

The following is a tentative schedule for the course. The instructor reserves the right to make schedule changes based on the needs of the students.

CIS290 – Object-Oriented Programming						
Week	Date	Chapte r	Торіс	Objectives	Class Activity	
1	8/16		No Class - Midstate Orientation Day			
2	8/23	1,2	Introduction to OOP & Software Development Getting Started with Java	1,2	Pretest	
3	8/30	3	Numerical Data	1		
4	9/6		No Class - Labor day			
5	9/13	4	Defining Your Own Classes – Part 1	1,2		
6	9/20	5	Selection Statements	1	Midterm Exam	
7	9/27	6	Repetition Statements	1		
8	10/4	7	Defining Your Own Classes – Part 2	1, 2, 3		
9	10/11	9 11	Characters and Strings File Input and Output	1, 5		
10	10/18	10	Arrays and Collections	1, 2, 5		
11	10/25		Inheritance and Polymorphism	1,2,3,4,5		
12	11/1	13	Inheritance and Polymorphism (Continued)		Final Exam	