# **COP 2551**

# Introduction to Object Oriented Programming with Java

(3 Semester Credits)

**Instructor:** Karthikeyan Umapathy **Office location:** Mathews (15/3214)

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# **Catalog Description:**

This course introduces the principles and practices of Object Oriented (OO) programming. Topics include user interface and problem data classes; class versus instance properties and methods; abstraction; encapsulation; inheritance and multiple inheritance; polymorphism; software design techniques; and problem solving. The concepts are utilized in numerous programming projects.

# **Prerequisite:**

CGS 1570 – Microcomputer Application Software.

# **Method of Teaching:**

Lecture, in-class presentations, outside programming assignments

### **Text & materials:**

Java Software Solutions: Foundations of Program Design, 5<sup>th</sup> Edition

Author: John Lewis and William Loftus Publisher: Addison-Wesley Professional

ISBN-13: 978-0321409492 / ISBN-10: 0321409493

Java TM Platform, Standard Edition 6 API Specification (view from the web URL: http://java.sun.com/javase/6/docs/api/)

Please download and install the JDK 6 (download free from the web URL: <a href="http://java.sun.com/javase/downloads/index.jsp">http://java.sun.com/javase/downloads/index.jsp</a>).

Please download and install the Eclipse IDE (<a href="http://www.eclipse.org/downloads/">http://www.netbeans.org/</a>) or Net Beans IDE (<a href="http://www.netbeans.org/">http://www.netbeans.org/</a>) according to your preference.

### **Important Dates:**

Deadline withdrawal 25% refund: January 25, 2008 Deadline withdrawal for spring term: March 28 2008

# **Course Requirements:**

Each student must complete all items listed:

2 Exams & ALL Assignments

#### Method of Evaluation:

2 Exams of 20% each (40% total) 5 Assignments of 10% each (total 50%) Class participation (5%) In-Class assignments (5%)

Letter grades will be based on:

90-100=A; 80-89=B:

70-79=C;

60-69=D;

less than 60=F.

The penalty for cheating on an exam or assignments will be F grade in the course. Work which is similar beyond coincidence will automatically be considered cheating by all parties.

# **Late Assignments:**

There will be a penalty of 10 % per day for late submission of assignments (including weekends and holidays). No credit will be given for work turned in more than one week late. No partial credit will be given for assignments which are not producing reasonable output.

# **Exam policy:**

Each student is required to take all exams at the scheduled times. All exceptions must be cleared with the instructor prior to the exam time. Exams missed for insufficient reason or without being cleared with the instructor prior to the exam time will be assigned a score of zero.

# **Academic dishonesty:**

No type of academic dishonesty will be tolerated. If you are caught cheating (on the assignments or exams) the punishment will be the most severe penalty allowed by the university policy. The policy on academic integrity and misuse of computer equipment and computer accounts found at the departmental web site at http://www.unf.edu/cocse/cis/ applies to this course.

#### Other remarks:

- A grade of incomplete will not be given except for catastrophic illness or calamity.
- All university rules regarding classroom behavior and attendance apply.
- Assignments for extra credit will not be assigned. If you do not complete an assignment by the date assigned, no make up assignment will be provided and you will receive a score of zero for that assignment.
- Attendance is expected. If a student misses a class, the student is still responsible for the material that is covered and for completing any assignments by the due date that may have been handed out by the professor in class.

### **Course Topics**

It is expected that the student will read the chapter assigned prior to the class meetings and will have questions for the instructor on any topics the student is not sure of, or does not understand.

The student is responsible for all topics presented in the text regardless of their coverage. In addition, the students will be responsible for all lecture material that is not included in the text.

Week	Topics	Chapters	
Week 1	Introduction and syllabus	Chapter 1.1 to 1.3	
Week 2	Introduction to Object Oriented Principles and Java programming	Chapter 1.4 to 1.6	Assignment 1 handout
Week 3	Data and Expressions	Chapter 2	Assignment 1 Due
Week 4	Classes and Objects	Chapters 3 and 4	Assignment 2 handout
Week 5	Logic and Looping	Chapter 5	Assignment 2 Due Assignment 3 handout
Week 6	Object Oriented Design	Chapter 6	Assignment 3 Due
Week 7	Exam Review		Exam 1
Week 8	Arrays	Chapter 7	
Week 9	Inheritance	Chapter 8	Assignment 4 handout
Week 10	Polymorphism	Chapter 9	Assignment 4 Due
Week 11	Spring Break		
Week 12	Exception Handling	Chapter 10	Assignment 5 handout
Week 13	Recursion	Chapter 11	Assignment 5 Due
Week 14	Collections	Chapter 12	
Week 15	Exam Review		
Week 16		Exam 2	

<sup>\*\*\*</sup>Please Note\*\*\*

Instructor reserves the right to modify course to meet the student's needs.

# **Students with Disabilities**

Students with disabilities who seek reasonable accommodations in the classroom or other aspects of performing their coursework must first register with the UNF Disability Resource Center (DRC) located in Building 10, Room 1201. DRC staff members work with students to obtain required documentation of disability and to identify appropriate accommodations as required by applicable disability laws including the Americans with Disabilities Act (ADA). After receiving all necessary documentation, the DRC staff determines whether a student qualifies for services with the DRC and if so, the accommodations the student will be provided. DRC staff then prepares a letter for the student to provide faculty advising them of approved accommodations. For further information, contact the DRC by phone (904) 620-2769, email (kwebb@unf.edu), or visit the DRC website (<a href="http://www.unf.edu/dept/disabled-services">http://www.unf.edu/dept/disabled-services</a>).