ISM 6259: Business Programming

Course Objective: The course is designed as an advanced level system implementation course to teach JAVA as a tool to create user-end systems.

Course Description: It is essential that the student has an intermediate level understanding of object-oriented programming. We will cover some of the basic programming concept very quickly so that we can focus on more advanced concepts of JAVA. Upon completion of the course you will have (a) learned the JAVA syntax; (b) learned some of the JAVA architecture and capabilities of the environment; (c) learned the concept of event-driven programming, events and event-handling; (d) learned component-based development as consumers of controls; (e) learned how to create client-side systems; (f) learned multi-threaded programming; and (g) other advanced concepts

Prerequisite: This course is designed to use JAVA as a tool for business system implementation. I assume the student already has taken ISM 6257 (Visual Basic) and ISM 6258 (C#) and has a thorough understanding of: (a) the general programming constructs such as conditional execution and control structures; (b) introductory level data structure such as arrays; (c) object-oriented concepts such as inheritance, data encapsulation and polymorphism; (d) database concepts and introductory level ANSI SQL; and (e) how to use a web browser and the WinZip compression software.

Textbook: Big Java 3rd Edition by C. Horstmann, 2008, ISBN 978-0-470-10554-2; Lecture notes posted on class website.

Software: (1) Netbeans 6.1 IDE; (2) Acrobat Reader

Assignment: (1) **Assignments** are designed to reinforce in-class lectures and to promote some creative thinking. Assignments and projects are due in class unless otherwise specified. Late assignments are not accepted. You cannot makeup for assignments. (2) **Quizzes.** There will be in-class quizzes. They are designed to test your conceptual understanding of the previous lecture and readings and will not require writing full programs. (3) **Exam**. There will be a midterm and final exam (cumulative).

Grading: Assignments (40-50%); Quizzes (10-20%); Exams (40-50%).