BOROUGH OF MANHATTAN COMMUNITY COLLEGE
City University of New York

Department of Computer Information Systems
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Title of Course: Business Systems II **Class hours: 2**
CIS 465 **Lab hours: 3**
Spring 2008
Credits: 3

Course Description:

This course is a second course in business programming where the students are introduced to advanced programming concepts in the JAVA language. Students will learn how to build event driven applications and applets with Graphical User Interface (GUI) with different components; will continue to write fault tolerant, robust and user friendly code. Students will use graphics, files and streams, exception handling, generic methods and generic classes, Java collection framework, multimedia and multithreading in JAVA programming.

Prerequisites/Co-requisites: CIS 365 or department approval

Student Learning Outcomes:

After completing this course, students will be able to:

- Build Java Code with Graphical User Interfaces
- Build Java applications and applets that need high degrees of robustness and fault tolerance
- Write programs using Graphics and Java 2D classes
- Understand all details of Java Exception Handling Mechanism
- Demonstrate awareness about using Files and Stream in Java programs
- Understand the possibilities of generic methods and generic classes.
- Demonstrate awareness about using the interfaces, classes, and algorithms of the Java collection framework.
- Write and execute Java applets
- Build Java applets and applications with multimedia
- Write Java program that can use multithreading

Required Text & Readings:

Textbook:	Java: How To Program, Seventh Edition
Authors:	H.M. Deitel, P.J. Deitel
Publ:	Prentice Hall
ISBN:	0-13-222220-5

Other Resources: Floppy diskettes and CDs recommended for use during Lab. Flash drives are strongly recommended.

Use of Technology (if applicable):

Evaluation & Requirements of Students:

Midterm examination	30%
Final examination	35%
Projects/Home work	10%
Quizzes	15%
Instructor's Evaluation	10%
	100%

Outline of Topics:

1. Review of Topics from CIS365 (Chapter 8-9-10)

2. GUI Components: Part 1.
   - Simple GUI-Based Input/output with JoptionPane.
   - Swing Components
   - Introducing to Event Handing with Nested Classes
   - Common GUI Event Types and Listerner Interfaces
   - How Event Handling works.
   - Jbutton, Jcheckbox, JradioButton.
   - JcomboBox and Using Anonimous Inner Class for Event Handling
   - Jlist, Multiple-Selectiion Lists.
   - Mouse Event Handling.
   - Adapter Classes
   - Jpanel Subclass for drawing with the Mouse
   - Key-Event Handling.
   - Layout Managers
   - Using Panels to Manage More Complex Layouts
   - JtextArea

3. Strings and Characters
   - Jslider
   - Windows
   - Using Menus with Frames
   - JpopupMenu.
   - Plugged Look–and-Feel
   - JdesktopPane and JinternalFrame to build Multiple-Document Interface.
   - JtabbedPane.
   - Layout Managers: BoxLayout and GridBagLayout

4. Graphics and Java2D

5. Graphical User Interface Components

6. Exception Handling

7. Multithreading

8. Files and Streams

9. Multimedia

10. Database Connectivity

11. Networking

12. Servlets

13. Security Issues- Security Exception

14. JavaBeans

College Attendance Policy:

At BMCC, the maximum number of absences is limited to one more hour than the number of hours a class meets in one week. For example, you may be enrolled in a three-hour class. In that class, you would be allowed 4 hours of absence (not 4 days). In the case of excessive absences, the instructor has the option to lower the grade or assign an F or WU grade.

Academic Adjustments for Students with Disabilities:

Students with disabilities who require reasonable accommodations or academic adjustments for this course must contact the Office of Services for Students with Disabilities. BMCC is committed to providing equal access to all programs and curricula to all students.

BMCC Policy on Plagiarism and Academic Integrity Statement:

Plagiarism is the presentation of someone else's ideas, words or artistic, scientific, or technical work as one's own creation. Using the idea or work of another is permissible only when the original author is identified. Paraphrasing and summarizing, as well as direct quotations, require citations to the original source. Plagiarism may be intentional or unintentional. Lack of dishonest intent does not necessarily absolve a student of responsibility for plagiarism.

Students who are unsure how and when to provide documentation are advised to consult with their instructors. The library has guides designed to help students to appropriately identify a cited work. The full policy can be found on BMCC's web side, www.bmcc.cuny.edu. For further information on integrity and behavior, please consult the college bulletin (also available online).