

COLLEGE OF BUSINESS STANDARD COURSE OUTLINE

I. General Information

Course Number:	IS 483
Course Title:	Business Applications Using Java
Units:	3
Prerequisite:	IS 300
Course Coordinator:	Thang N. Nguyen
SCO prepared by:	Thang N. Nguyen
Date prepared/revised:	10/11/2012

II. Catalog Description

Prerequisites: IS 300, 301.

Development of business application using Java language. Tools and technologies including data types, program control, objects, classes and relationship, class inheritance, interfaces, polymorphism, inner classes, the relationship between super-classes and sub-classes, event-driven programming and socket-bases communication in Java.

Letter grade only (A-F).

III. Curriculum Justification(s)

Java is one of the major object-oriented languages. It is found in a myriad of application development in all areas of business discipline. Critical thinking as well as Quantitative and Technical skills are the major learning goals. As today application development involves different stakeholders from users to developers, from professionals to top management, Communications and Team and interpersonal skills are crucial. The OO technology is conceived and implemented by Sun after C++ technology and followed by MS technology C#. The technology is exploited by large software development in communications, databases, Internet-based enterprise-wide applications and is quite involving with new development processes and models. Thus, Critical thinking and Quantitative and Technical Skills are important. Students, upon the completion of the course will be able to be part of the application development teams using the language and technology in the OO platform.

IV. CBA Undergraduate Program Learning Goals

Upon completion, the student will meet the following four specific CBA learning goals:

- Learning Goal #1 – Critical Thinking
- Learning Goal #3 – Team and interpersonal skills
- Learning Goal #4 – Communication skills

Learning Goal #6 – Quantitative and Technical Skills

V. Course Objectives

Upon completion students should be able to

- Describe and understand object-oriented concepts,
- Describe and use Java foundation, objects, classes, and methods
- Perform numerical processing and character processing
- Develop logic and decision
- Specify inheritance and polymorphism
- Code file processing
- Program simple to moderate business applications using Java.
- Use Advanced topics such as arrays, recursion, library use

VI. Outline of Subject Matter

- Object-Oriented Concepts
- Data and methods (abstraction and encapsulation)
- Decisions and loops (logic)
- Character and string processing
- Arrays
- Inheritance and polymorphism
- File processing
- Exception handling
- Java GUI and Swing
- Graphics, Animation, and Sound, and Applets

VII. Methods of Instruction

This course is taught within a selected platform, preferably Sun Systems. It uses a collection of development examples from front-end development (GUI) to back-end connection (databases): inputs, outputs and logic processing. The development example assignments range from simple to moderately complex cases. These cases exemplify the use of Java language features as well as business requirements and functions.

VIII. Textbooks

Required Text

The textbooks listed below or similar textbooks can be selected for the course.

Java Programming, current Edition by Joyce Farrell. Cengage Learning

Introduction to Java Programming: Comprehensive Version, current edition, by Y. Daniel Liang. Prentice Hall

IX. Instructional Policies Requirements

A. Assessment Criteria

Homework

Students will complete individual homework profiling their competence in various subject matters (20%).

Exams

Students will have one mid-term exam (25%), and the final exam (25%).

Projects

An incremental programming project is required (individual or group) for 30%. The project shows case problem solving and uses of the business programming language and/or database technologies to develop real-world business application systems.

B. Required Statement

In compliance with university policy: Final grades will be based on at least three, and preferably four or more, demonstrations of competence. In no case will the grade on any class tests count for more than one-third of the course grade.

C. Attendance, Withdrawal, Late Assignments

Students are expected to attend courses and turn in assignments on time. Specific attendance and late assignment policies are up to each individual instructor's discretion. The withdrawal policy is the same as that of the university.

D. Disabilities

Students with disabilities are responsible for notifying their instructor as early as possible of their needs for an accommodation of a verified disability. A student with a disability is urged to consult with Disabled Student Services as soon as possible in order to identify possible accommodations to enhance academic success.