#### BLOOMSBURG UNIVERSITY OF PA College of Business

#### **COURSE SYLLABUS**

| DATE PREPARED:   | August, 2016  |  |  |  |
|--|---|--|--|--|
| INSTRUCTOR:  | Evren Eryilmaz<br>Office: Sutliff Hall, Room 339<br>Hours: Tuesday, Thursday 12:30 PM – 2:30 PM<br>Wednesday 9:00 AM – 10:00 AM<br>Phone: 570.389.5448<br>Email: <u>eeryilma@bloomu.edu</u> |  |  |  |
| DEPARTMENT:  | Department of Innovation, Technology, and Supply Chain Management   |  |  |  |
| <b>COURSE NUMBER:</b>  | ITM 352.01  |  |  |  |
| COURSE TITLE:  | Business Application Development 2  |  |  |  |
| <b>CREDIT HOURS:</b>   | 3   |  |  |  |
| PREREQUISITES:   | ITM302  |  |  |  |
| COURSE MEETING DAY & TIME: Tuesday and Thursday 9:30 AM – 10:45 AM |   |  |  |  |

COURSE LOCATION: SH 106

## **CATALOG DESCRIPTION:**

This course is designed for students with some experience in programming. The syntax of the Java programming language, object-oriented programming, creating graphical user interfaces (GUI), exceptions, file input/output (I/O), and how to create Java applications and applets in order to answer business problems in an organizational setting will be covered. This course is required for a programming minor within the Information and Technology Management program. It is also suitable as an elective for undergraduate students interested in creating Java applications.

#### **GOALS AND/OR OBJECTIVES:**

Upon completion of the course, students should be prepared to:

1. Understand concepts of object, class, instance, member data/fields, member attributes/methods, and local variables.

- 2. Apply java language keywords, and syntax to create statements for declaring and storing java data types.
- 3. Understand the result of operations and decision-making on java data types, using any operator or method.
- 4. Create statements for data operations, decision-making, class definition, object constructors, method definitions and method invocation.
- 5. Understand basic concepts of Java's dynamic event handling and use event listeners and event handlers to process events.

## **COURSE CONTENT:**

1. Analyzing fundamental concepts of a java program

a) Object

b) Class

c) Instance

2. Declaring and storing java data types

a) Java language keywords

- b) Java syntax
- c) Data types
- 3. Performing operations and decision-making on java data types
  - a) Decision-making
  - b) Object constructors
  - c) Method definitions and method invocation
- 4. Dynamic event handing in Java
  - a) Events
  - b) Event listeners
  - c) Event handlers

## 5. Writing code that implements object oriented programming principles and design patterns

- a) Encapsulation
- b) Composition
- c) Inheritance
- 6. Writing code to invoke methods and constructors
  - a) Overridden or overloaded methods
  - b) Parental or overloaded constructors
  - c) Effects of invoking methods
- 7. Designing and constructing instances of any concrete class
  - a) Normal top-level classes
  - b) Inner classes
  - c) Static inner classes
  - d) Anonymous inner classes
- 8. Writing code to define and instantiate classes
  - a) Java.lang
  - b) Java.util
  - c) Java.awt
  - d) Java.io
- 9. Creating graphical user interfaces with

- a) Java's awt (abstract windowing toolkit)
- b) Event driven graphical user interface programming

### **METHODS:**

Discussion, videos, case studies, computer lab exercises, independent research, and active learning activities are the principal methods of teaching. In addition, students are encouraged to read quality publications on technology and business on a regular basis.

## **EVALUATION PROCEDURES:**

*Hands on Computer Assignments: (40%)* A variety of hands on computer assignments will be completed during the semester. The assignments will include application of course material and written reports. Details about each assignment will be posted on BOLT.

*Quizzes: (35%)* A number of quizzes focusing on reading assignments will be completed during the semester. Details about each quiz will be posted on BOLT.

*Final Exam: (25%)* A comprehensive final exam will be given on the day specified on the university final exam schedule. The exam will cover all assigned readings and any other material discussed in class.

## **COMPUTER LABORATORY:**

There will be computer laboratory sessions that will focus on the assignments. Details about the computer laboratory sessions will be announced in class and posted on BOLT.

| GRADING SCALE. |              |   |    |            |  |
|----------------|--------------|---|----|------------|--|
| Grade          | Points       |   |    | Percentage |  |
| А              | 100          | - | 93 | 93         |  |
| A-             | 92           | - | 90 | 90         |  |
| B+             | 89           | - | 87 | 87         |  |
| В              | 86           | - | 83 | 83         |  |
| B-             | 82           | - | 80 | 80         |  |
| C+             | 79           | - | 77 | 77         |  |
| С              | 76           | - | 73 | 73         |  |
| C-             | 72           | - | 70 | 70         |  |
| D              | 69           | - | 60 | 60         |  |
| Е              | less than 60 |   |    |            |  |

#### **GRADING SCALE:**

Please note: This course adheres to the Bloomsburg University Academic Integrity Policy.

#### **RELIGIOUS OBSERVENCE:**

Students must notify the instructor in writing at least one week prior to a class absence because of religious observance.

#### **SUPPORTING PROCEDURES:**

Research references are part of the Andruss Library collection.

BOLT, a course management application, will be used for posting the assignment schedule, submission of assignments, and posting of course documents. The application is available online at the following Web address: http://bolt.bloomu.edu.

# **REQUIRED TEXT:**

Java How to Program (9th Edition) Author: Paul Deitel, Harvey Deitel Publisher, Year: Pearson, 2012 ISBN-10: 0132575663 | ISBN-13: 978-0132575669

## **OPTIONAL TEXT:**

Title: Introduction to Java Programming Comprehensive Edition Author: Y. Daniel Liang Publisher, Year: Pearson, 2015 ISBN10: 0-13-37631-2 | ISBN 13: 978-0-13-376131-3

## **DUE DATES:**

Assignments are due on the due date and time. If you have an extreme emergency of some kind, please let me know about it before an assignment is due. Late work is not accepted. Upload whatever you have finished.

# **IMPORTANT CLASS POLICIES:**

This course adheres to the *Bloomsburg University Academic Integrity Policy* and the policies described in the student handbook, *The Pilot*.

It is the responsibility of the student to know and observe the policies and regulations of the University. This includes the *Policies and Procedures* described on the URL: bloomu.edu/polices\_procedures; specifically:

PRP 3506 – Class Attendance PRP 3512 – Academic Integrity PRP 3381 – Student Disruptive Behavior PRP 3516 – Academic Exam Policy

As a professional courtesy to all, please turn off all electronic devices (cell phone, pager, I-Pod) during class.

Grades will be posted in BOLT. Questions regarding a graded assessment **must be raised within one week** of the assessment return and posting on BOLT.

Class correspondence will be sent to student "huskies.bloomu.edu" email address.

Assignments and correspondence may NOT be placed in instructor's College of Business mail box. Each assignment will include submission instructions.

All assignments and correspondence must include the student's full name and the course name.

It is the student's responsibility to confirm the integrity of files submitted to BOLT Dropbox. Do not forward the BOLT Email confirmation to the instructor since this is NOT evidence of a submission to the Dropbox of an assignment that follows the appropriate directions. The process for confirming the integrity of files submitted to BOLT Dropbox will be demonstrated in class.

A student may not submit an assignment completed in another course for credit in this course.

All written assignments may be subject to submission for textual similarity review to Turnitin.com for the detection of plagiarism. All submitted assignments will be included as source documents in the Turnitin.com reference database solely for the purpose of detecting plagiarism of such papers. Use of the Turnitin service is subject to the *Terms and Conditions of Use* posted on Turnitin's website.

The Bloomsburg University Writing Center (BUWC) offers free support for graduate and undergraduate writers at any point in the writing process. They will not write any part of a student's paper, but will help students get started and then keep going; they can read what has been written and ask questions to help a student think about what a reader might need; they can work with students on grammar, mechanics, or format; and they help develop strategies for proofreading and editing.

The University Tutorial Services (UTS) offers peer tutoring at no charge to Bloomsburg University students. The UTS office is located in Warren Student Services Center, Room 13.