## Overview and Description:

This laboratory course teaches the fundamentals of computer programming using the Java programming language. Topics include: syntax, data types, control structures, functions/methods, object-oriented programming, Java collections, file input/output, and JDBC.

## Instructor, Contact Email, Office Hours and Site:

Instructor
>   Andrew Sheehan

**E-mail**
>   asheehan at bu

**Office hours**
>   Usually before and after our class.

**Official BU Calendar**
>   Official Academic Calendar for 2013-2014

CS232 relies on Blackboard, learn.bu.edu. You need to have an account to have access to our course. Please attempt to login as soon as you can and verify that it works.

## Topic Coverage

1. Variables, Expressions, Operators and Data Types
2. Control Structures
3. Objects and Classes
4. File I/O
5. Java's Collections
6. Exception Handling
7. JDBC (with MySQL)

## Course Books

**1. [Savich]** *"Java: An Introduction to Problem Solving and Programming, 6e"*

**2. [Anderson]** *"Java Illuminated, 4e"*

ISBN: 9781284087857
eISBN: 9781284087857.0
print-ISBN: 9781284057829

**eBook:**          http://store.vitalsource.com/show/9781284087857
**eBook reader:** https://support.vitalsource.com/hc/en-us/articles/201344733

## Integrated Development Environment ("IDE")

Students can use any IDE they choose; such as Eclipse, JDeveloper, Netbeans or IntelliJ.
Download the appropriate version (32/64 bit) of "Eclipse IDE for Java Developers".
IntelliJ can be found at http://www.jetbrains.com
Eclipse can be found at http://www.eclipse.org/downloads/

## Lateness Policies

- Homework must be submitted electronically, via Blackboard.
- There will be a 10% deduction for homework that is up to 24 hours late.
- There will be a 20% deduction for homework that is 24-48 hours late.
- We will not accept any homework that is more than 48 hours late.
- Extensions and makeup quizzes/exams will only be given in **documented cases of serious illness or emergency.**
- You cannot redo your submitted work.
- Incomplete's will not be given.

# Grading Policies

**Homework**
Homework assignments will be given throughout the semester. 30% of your grade.
**Quizzes**
Quizzes are given throughout the semester. **They cannot be made up.** 20% of your grade.
**Mid-semester Examination**
25% of your grade.
**Comprehensive (Final) Examination**
25% of your grade.

# Academic Honesty

The course is governed by the Boston University Academic Conduct, Metropolitan College.
You need to be aware of its contents: www.bu.edu/met/for-students/met-policies-procedures-resources/academic-conduct-code

# Course Schedule (Section B2: Tuesday)

## Schedule of Events* (Subject to change)

| Week | Dates | Topics | Readings | Homework |
|------|-------|--------|----------|----------|
| Week 1 | January 20, 2015 | Algorithms. Pseudocode. Design before Development. Modeling/UML. | [Savich] Chapter: 1<br>[Anderson] Chapter: 1 | |
| Week 2 | January 27, 2015 | Quiz #1<br>Winter Storm: BU was closed. | | |
| Week 3 | February 3, 2015 | Primitives and expressions. Strings. Scanner/console<br>Conditional statements (if/else). Enumerations. | [Savich] Chapter: 2, 3<br>[Anderson] Chapter: 2, 5 | |
| Week 4 | February 10, 2015 | Iterative statements. | [Savich] Chapter: 4<br>[Anderson] Chapter: 6 | Homework #1 Due |
| Week 5 | February 17, 2015 | [No Class] Substitute Monday Schedule of Classes for President's Day | | |
| Week 6 | February 24, 2015 | Classes and Objects: Encapsulation. | [Savich] Chapter 5<br>[Anderson] Chapter: 3 | Homework #2 Due |
| Week 7 | March 3, 2015 | Quiz #2<br>Classes and Objects: Statics. Overloading. Overriding. | [Savich] Chapter 6<br>[Anderson] Chapter: 7 | |
| Week 8 | March 10, 2015 | [No Class] Spring Recess | | |
| Week 9 | March 17, 2015 | Midterm Examination | | |
| Week 10 | March 24, 2015 | Interfaces | [Savich] Chapter 8<br>[Anderson] Chapter: 10 | |
| Week 11 | March 31, 2015 | Quiz #3<br>Arrays | [Savich] Chapter 7<br>[Anderson] Chapter: 8,9 | Homework #3 Due |
| Week 12 | April 7, 2015 | File Input/Output | [Savich] Chapter 10<br>[Anderson] Chapter: 11 | Homework #4 Due |
| Week 13 | April 14, 2015 | Quiz #4<br>Exceptions, JDBC | [Savich] Chapters 9<br>[Anderson] Chapters: 11 | |
| Week 14 | April 21, 2015 | Recursion | [Savich] Chapter 11<br>[Anderson] Chapter 13 | Homework #5 Due |
| Week 15 | April 28, 2015 | Dynamic Data Structures | [Savich] Chapter 12<br>[Anderson] Chapters: 14 | |
| Week 16 | May 5, 2015 | Comprehensive Examination | | |