Computer Technology Department
Business/Public Service Division
GREENVILLE TECHNICAL COLLEGE

COURSE SYLLABUS

Course Title: Introduction to Java Programming
Course Number: CPT 236

READ THIS SYLLABUS CAREFULLY

You should read this syllabus carefully and ask your instructor about *any* aspects that you do not understand. The syllabus is an agreement between you and your instructor concerning course objectives, course content, grading, and other policies and procedures particular to this course. The following information is specific to the course. Three additional documents are provided as attachments and *are considered a part of this syllabus*:

Attachment I:

Each instructor will provide a supplement to this syllabus. The supplement will include: a week-by-week plan of instruction based on the section in which you are enrolled; your instructor's name, office hours and/or office location; and your instructor's contact information and recommended best methods to contact your instructor.

Attachment 2:

The Department responsible for developing and teaching has policies and procedures in place to assure quality instruction for all students. These are attached as "Departmental Policies and Procedures."

Attachment 3:

Please note that it is your responsibility to read the current Student Handbook included in Greenville Technical College's Catalog. (See website.) The Student Handbook addresses specific academic and student conduct policies and procedures. Excerpts from the Student Handbook representing the policies and procedures most often referred to in working with students are provided for your convenience as "Attachment 3."

Approved by: WB Sanders 8-14-14

Beau Sanders, Department Head, Computer Technology Department
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Approved by: _____ Date: 9/7/14

Joel D. Welch, Ph.D., PE
Dean, Technology Division

This syllabus will remain in effect until revised or reviewed no later than August 2015.

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Course Title: Introduction to Java Programming
Course Number: CPT 236

Lecture hours per week: 3.0 **Lab/Clinic Hours:** **Semester credit hours:** 3.0

Prerequisites: CPT 186 or CPT 187. Computer Technology students must obtain a minimum grade of "C" in all CPT and IST courses.

Catalog Course Description: This course is an introduction to Java programming. Topics will cover Java syntax and classes for use in the development of Java applications and applets.

Purpose of the Course: This course introduces the student to the Java programming language through the implementation of Java applications and applets. The course introduces an object-oriented programming approach to solving problems and stresses accepted software engineering techniques for the design of the programming solutions that consist of cohesive, readable, and reusable modules. The goal is to teach not only the Java language syntax but also a rational approach to Java application and applet program development by providing programming examples along with applicable lab assignments.

Required text(s) and other materials:

1. ***Introduction to Java Programming,*** 10th edition, Brief Version, Y. Daniel Liang, Pearson, ISBN:9780133592207.
2. NOTE: Students in traditional classes must access Blackboard for course-related information. Students in hybrid and online classes will access their online content through Blackboard.

COLLEGE-WIDE STUDENT LEARNING OUTCOMES

1. Communication – Students will demonstrate the ability to use active reading and listening skills and to produce effective written and oral communication for varying audiences.

2. Information Technology and Technological Literacy – Students will demonstrate competency in using computer technology within a field of study.

3. Critical Thinking/Reasoning – Students will demonstrate the ability to apply the scientific method, mathematical processes, and research skills to analyze and solve problems/issues by using reflection and reasoning to justify conclusions.

4. Professional and Personal Responsibility – Students will demonstrate the ability to exhibit conduct, attitudes, and etiquette appropriate to the student's community and chosen career. Students will demonstrate the ability to manage time, to use effective interpersonal skills, and to display responsible behavior.

5. Diversity – Students will demonstrate the ability to recognize diversity and to demonstrate respectful conduct and attitudes toward all. Students will demonstrate the ability to explain how global issues impact life, work, and opportunities.

Revised December 31, 2012

COMPUTER TECHNOLOGY PROGRAM LEVEL STUDENT LEARNING OUTCOMES

Upon successful completion of the Computer Technology Degree students will be able to:

1. Install computer and network hardware.
2. Install computer operating systems and application software.
3. Design, create and test computer programming solutions.
4. Demonstrate the ability to take initiative, assume responsibility, and work under pressure with minimum supervision by successfully completing "hands-on" computer assignments.
5. Analyze, troubleshoot, and correct computer related technical problems.

Revised August 2012

CPT 236 COURSE OUTCOMES

Students who successfully complete this course will have demonstrated the skills required to accomplish the following objectives with a minimum competence level of 70 percent.

1. Students will be able to demonstrate the ability to take initiative by completing a lab assignment with minimal supervision.
2. Students will be able to demonstrate the ability to work under pressure, and show responsibility by completing lab assignments.
3. Students will be able to demonstrate a basic proficiency in the use of Java syntax to include primitive data types, operators, selection statements, control statements, arrays, classes and methods.
4. Students will be able to demonstrate knowledge of naming conventions to include variable and class naming conventions.
5. Students will be able to demonstrate the input/output capabilities supported by the Java language.
6. Students will be able to demonstrate knowledge of object-oriented concepts including encapsulation, inheritance and polymorphism as it applies to Java classes.
7. Students will be able to create Java applets and Java applications to include GUI Swing components and event handling.

The objectives of the CPT 236 course are intended to meet the CPT program level student learning outcomes.

CPT 236 – MAIN TOPICS

PLAN OF INSTRUCTION:

TOPIC

Topic 1	Introduction to Computers, Programs, and Java
Topic 2	Elementary Programming
Topic 3	Selections
Topic 4	Loops
Test 1	**(Topic 1 -4)**
Topic 5	Objects and Classes
Topic 6	Methods
Test 2	**(Topic** 1 **– 6)**
Topic 7	Arrays
Topic 8	Advanced Object Oriented concepts
Topic 9	Applets and Graphics
Test 3	**(Topic 1 – 9)**
Topic 10	GUI Programming
Final Exam	**(Comprehensive)**

The final exam for online students will be administered on the Barton Campus and will be scheduled at a time determined by the department.

Tutoring is available in the Business Division Student Lab located on the Barton Campus in the Engineering Building (Building103), Room 113. The hours for tutoring are posted on door of Room 113; no appointment is necessary. There are no fees required for this service.

CPT 236– COURSE SPECIFIC REQUIREMENTS

There are no specific course requirements other than attachment 1.

CPT 236 – EVALUATION AND GRADING INFORMATION

Grades will be calculated as follows:

Exams represent 85 percent of the final grade: 60 percent tests and 25 percent final exam.
Lab assignments count 15 percent of the final grade.

1. A minimum of 10 programming assignments are required for the course.
2. Programming assignments will be assigned from selected chapters.
3. The following factors will also be considered in grading programs:
   a. The program must work correctly and produce the desired results.
   b. The program must use good style / good programming practices.

c. Program must be efficient.
d. Documentation should be clear and meaningful.

All assignments (i.e., labs, projects, research papers, etc.) for this course must be completed and submitted to the instructor by the due date established in order to receive credit for the assignment.

Final letter grades will be issued as follows:

A	=	90 - 100
B	=	80 - 89
C	=	70 - 79
D	=	60 - 69
F	=	0 - 59