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| I. | HCCC Logo-BlackleftsideCourse ID (department & number):  **CSC 117** |
| II. | Course Name:  **JAVA Programming** |
| III. | Number of Credits Awarded for Course: 3 |
| IV. | Prerequisite or Co-requisite courses or academic standing (if applicable):  PREREQUSITE(S): Math 100 or higher |
| V. | Indicate if New or Modified Course: Modified Course |
| VI. | Semester and Year Course will First be Offered: Fall 2023 |
| VII. | Name and Telephone Number and/or e-mail address of department chair or other appropriate contact person:  Heather DeVries, Academic Representative to NJ Transfer  [hdevries@hccc.edu](mailto:hdevries@hccc.edu)  201-360-4660 |
| VIII. | Detailed Course Description: This course introduces students to Java programming, an object-oriented language. Students will develop stand-alone business applications and create applications called from within HTML page (applets) designed to be transported over the Internet and executed by browsers. The syntax, control structures, methods, arrays, strings, and characters and graphics will be applied to bring interactive applications to web clients. |
| IX | Outline of Course Objectives  Upon completion of this course, students will be able to:   * Perform input and output functions using Java * Use Java’s control structures, functions, arrays, pointers, and strings * Discuss data abstraction using classes * Write Java programs using an object-oriented format |
| X. | Texts, Journals and Other Materials used in Course  Starting out with Java 6th Edition  ISBN-13: 978-0134059877  ISBN-10: 0134059875 |
| XI. | Grade Determinants  Student will be graded based on:   * Midterm 30%. * Projects 20%. * Final 30%. * laboratory and homework assignments 20%.  Late Homework assignments:  1. ***Up to 3 days late, 30% penalty (10% per day).*** 2. ***Beyond 3 days, not accepted.*** 3. ***Submission of homework assignments, tests, projects is NOT accepted by email.*** |
| XII. | Number of Papers & Examinations  The schedule for the tests and the laboratory assignments depends on the covered material. |
| XIII. | Schedule of Topics to be Covered   |  |  |  |  | | --- | --- | --- | --- | |  | **Topic** | **Lab** | **Homework** | | 1 | Ch1 Introduction Why Program?  Computer Systems: Hardware and Software  Programming Languages What Is a Program Made Of? The Programming Process |  | Read chapter 1  Install the Java Compiler | | **2** | Chapter 2 discusses the following main topics:  The Parts of a Java Program  The print and println Methods, and the Java API  Variables and Literals Primitive Data Types Arithmetic Operators  Combined Assignment Operators | End of chapter program | TBD | | **3** | Chapter 3 discusses the following main topics:  The if-else-if Statement Logical Operators  Comparing String Objects | End of chapter program | TBD | | 4 | The Conditional Operator The switch Statement  Displaying Formatted Output with System.out.printf and String.format The Increment and Decrement Operators  The while Loop  Using the while Loop for Input Validation | End of chapter program | formatting (setw(), set precision … (hw a program to calculate the slope)select a program from the end of the chapter or professor provideded program, end of chapter questions | | **5** | Chapter 4 discusses the following main topics:  The do-while Loop The for Loop  Running Totals and Sentinel Values | End of chapter program | select a program from the end of the chapter or professor provideded program, end of chapter questions | |