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The University of Virginia
School of Continuing and Professional Studies

Number, Title, and Credits

IT 3210 Programming with Java;
Three semester hours of credit.

Prerequisites

None – no prior programming experience is assumed.

Instructor:

Mike Vito
mav9f@virginia.edu

Semester, Dates, Times

May 18, 2015 – Aug 7, 2015

Course Description

Studies key structures, concepts, and applications needed to write programs with Java, an object-oriented programming language used for developing user interfaces on the web and as a general purpose programming language.

IT3210 serves a foundation course that covers fundamental procedural programming along with an introduction to object orientation. Students will learn about control structures, stepwise refinement, and arrays. In addition, topics of object orientation, inheritance and interfaces will be covered.

IT3210 will use open source software, the Java JDK and Eclipse, to provide the student with the applied skills to design and implement fundamental programming problems.

Objectives

The overall objective of IT3210 is to provide students with fundamental experience in devising solutions to programming problems using procedural and object oriented techniques. The general objectives are:

- Learn the basic structure and syntax of Java programs
- Understand the basic data types used to solve programming problems
- Apply decision and loop structures in solving programming problems
- Apply methods and array structures to problem solving
- Understand and apply file input and output for data persistence
- Understand object oriented concepts of class definition, inheritance, and interfaces

Instructional Procedures

This course will be conducted online over the internet. A typical class session will include lecture and class discussion. The internet will be used to post material and for interaction with questions and discussion threads. Students will be expected to comply with the class schedule and complete specified assignments by the deadlines given by the instructor.

Textbook

Big Java Late Objects
Cay S. Horstmann; John Wiley & Sons; Pub. Date: February 1, 2012
Print ISBN: 978-1-118-08788-6; Web ISBN: 1-118087-88-7

Student Expectations

Students are expected to have access to a computer with a working connection to the internet and a web browser so that they can collaborate and turn in assignments online. Students are also expected to install open source development tools for Java programming.

Students will be expected to comply with the class schedule and complete specified assignments by the deadlines given by the instructor.

Evaluation

Grading will be based on online participation, homework exercises, and projects. The online participation will consist of group exercises and discussions that will be conducted via the Internet. The homework exercises will consist of small programs based on the readings and lecture. Projects will be comparatively larger:

Participation: 10%
Homework Exercises: 60%
Projects: 30%

                        100%