

NORTHWESTERN CONNECTICUT COMMUNITY COLLEGE

COURSE SYLLABUS

Course Title: Object Oriented Programming Using Java

Course #: CSC* 220

Course Description: 3 Credits. A course in the Java programming language that uses modular programming and emphasizes object oriented techniques. This course will address event driven programming in the Windows environment and interfaces to the internet. This course may fulfill an advanced programming language requirement.

Pre-requisite/Co-requisite: CSC* 210 or CSC* 109

Goals: Students are expected to

- distinguish OO programming from declarative and procedural ones
- describe the Java Virtual Machine architecture and behavior
- define and exemplify secure classes and inner classes, objects and message passing
- understand and implement applets, servlets, and thread save programs
- compare and contrast inheritance and polymorphism
- compare and contrast Java interfaces, abstract classes, and classes
- write well-structured and documented OO applications with event-driven graphical user interfaces
- master basic JAVA library and tools at a depth that is sufficient to solve real-world programming problems

Outcomes: Upon successful completion of this course students will be able to:

- Analyze and explain the behavior of simple programs involving the fundamental programming constructs develop applications to solve problems and tasks in Java
- Explain the use of each data type and how each is stored in memory
- Modify and expand short programs using control structures and functions
- Design, implement, test and debug a program that uses each of the following fundamental programming constructs: basic computation, simple I/O, standard conditional and iterative structures, and the definition of functions
- Apply the techniques of structured (functional) decomposition to break a program into smaller pieces
- Explain the difference between event-driven programming and command-line programming

College Policies

Plagiarism: Plagiarism and Academic Dishonesty are not tolerated at Northwestern Connecticut Community College. Violators of this policy will be subject to sanction. Please refer to your "Student Handbook" under "Policy on Student Rights," the Section entitled "Student Discipline," or the College catalog for additional information.

Americans with Disabilities Act (ADA): The College will make reasonable accommodations for persons with documented learning, physical, or psychiatric disabilities. Students should notify Roseann Dennerlein, the Counselor for Students with Disabilities. She is located at Green Woods Hall, in the Center for Student Development. Her phone number is 860-738-6307 (V/TTY) and her email is rdennerlein@nwcc.commnet.edu.

School Cancellations: If snowy or icy driving conditions cause the postponement or cancellation of classes, announcements will be made on local radio stations. Students may also call the College directly at (860) 738-6464 to hear a recorded message concerning any inclement weather closings. Students are urged to exercise their own judgment if road conditions in their localities are hazardous.