

Collin College - Continuing Education

COURSE SYLLABUS

COURSE INFORMATION

Course Number: JAVA 6510

Course Title: Java Programming III

Course Description: Expand your Java and Object-Oriented knowledge base and take your Java programming to a higher level. Topics to be covered include: unit testing and debugging, multithreading and concurrency, advanced collections, generic programming, graphical user interfaces (Swing) and Java reflection and Type information, and other advanced topic to be decided.

Suggested Course Prerequisite(s): Java Programming II or a fundamental knowledge of Java.

Course Resources: Do not purchase text before first class meeting.
Murach's Java Programming 4th ed. Prentice Hall; Joel Murach ISBN: 978-1-890774-65-3

Student Learning Outcomes: Upon completion, you will:

- Be able to design and develop efficient complex Java applications
- Understand Java best-practice design and development concepts
- Have a firm foundation of all important Java concepts
- Be able to develop Java applications with a graphic user interface

Certification Notes: N/A

Next course recommendation: Introduction to Spring, Design Patterns, Agile Design with Test-Driven Development.

Refund Policy: Please refer to www.collin.edu/ce/inforegistrar.html for our refund policy. No refunds after the start time of the first class.

Americans with Disabilities Act: Collin College will adhere to all applicable federal, state and local laws, regulations and guidelines with respect to providing reasonable accommodations as required to afford equal opportunity. It is the student's responsibility to contact the ACCESS office, SCC-D140 or 972.881.5898 (V/TTD: 972.881.5950) to arrange for appropriate accommodations. See the current *Collin Student Handbook* for additional information.

Course Sessions: Listed are guidelines to indicate all topics that will be covered during your course. Do not plan your personal calendar based on these sessions. Your instructor will give you a calendar for your class that will indicate specific topics, assignments, and days.

Lesson Plan – by week or session:

Session 1: Unit-testing and debugging

Session 2: Multithreading and Concurrency 1

Session 3: Multithreading and Concurrency 2

Session 4: Generics and Collections in depth

Session 5: Reflection, Class, and Type information

Session 6: Best practice discussion, practical Java examples and exercises

Session 7: Graphical user interfaces using Swing 1

Session 8: Graphical user interfaces using Swing 2

Method of Evaluation: Unless otherwise stated, course completion is evaluated on the basis of attendance. Students must be in attendance 90% of each course in a certificate series for successful completion and to earn a certificate as specified.