

Course Outline

- **Course name:** Java Development
- **Course Number:** MADP 202
- **Minimum Passing Grade:** 70%
- **Start Date:** March 12, 2018
- **End Date:** May 11, 2018
- **Total Hours:** 160 hours
- **Total Weeks:** 8 weeks

Course goals

- To provide an understanding of object-oriented programming concepts.
- To prepare students for follow-on courses in software development.
- To learn and apply best practices in the development of Java applications.

Course Outcomes

- Explain object-oriented programming concepts including: object, class, method, and encapsulation.
- Explain abstraction and modularization in object-oriented programming.
- Describe data types used in programming.
- Explain the use of variables and constants.
- Identify and use control structures.
- Use correct syntax and documentation standards.
- Read class library interfaces.
- Write simple programs in Java.
- Test and debug simple programs in Java.
- Demonstrate skills in problem solving.

- Demonstrate fundamental programming skills using conditionals and iteration.
- Demonstrate object-oriented programming skills by designing and writing Java programs that use multiple interacting classes, inheritance and polymorphism.
- Design robust, easily-maintained programs using Java.
- Test and debug Java programs using a variety of testing techniques.
- Prepare program documentation.
- Install and use the Java Software Developer Kit (SDK) Standard Edition and an Integrated Development Environment (IDE) to develop Java applications.
- Explore the use of Eclipse as a Java IDE.
- Debug programs using a variety of methods including breakpoints, traces, and code stepping.
- Build Java programs that conform to Java coding style, naming, and documentation conventions.
- Demonstrate advanced object oriented development skills through the use of design patterns.

Course Distribution

- Quizzes (6)
- Labs (6)
- Final Exam

- Makeup Tests, exams, or quizzes: There will be no makeup tests, exams, or quizzes. If you miss a test, exam or quiz, you will receive zero marks. Exceptions may be made for documented medical reasons or extenuating circumstances. In such a case, it is the responsibility of the student to inform the instructor immediately.
- Late assignments/online submissions or projects will not be accepted except for proof of illness. No assignments/projects will be accepted after marked assignments or solutions to questions have been posted.

- Midterm exams, final exams, and project papers: The midterm exam, final exam, and final project will not be returned to the student.

NOTE:

Any form of plagiarism will result in a grade of ZERO for the first instance. Any subsequent instances of Academic Misconduct will meet with harsher penalties. These penalties may include failing the course and/or removal from the program.