Northwest Arkansas Community College
Business and Computer Information Systems Division

Discipline Code
PROG

Course Number
2413

Course Title
Programming Logic III

Catalog Description
(F) This course is a continuation of PROG 1403 (Programming Logic II). After a review, the student is introduced to applied programming topics to prepare students for work as a software developer.
Topics include: Generics, database access, design patterns, consumption of web services, and multi-threading programming (Outside lab time will be required.) Prerequisite: PROG 1403.

Prerequisites
PROG 1403

Credit Hours
3 Credit Hours

Contact hours
45 Lecture/Lab Contact Hours

Load hours
3 Load Hours

Semesters Offered
Fall

ACTS Equivalent
None

Grade Mode
A-F

Learning Outcomes

The student will:

- Identify, explain, and apply intermediate to advanced features (e.g. packages, interface, exceptions, generics) and the necessary syntax to solve a given problem.
- Create a program to consume a web service.
- Apply multithreading programming techniques.
- Use design patterns to solve a given problem.
- Create a program to read / write / update a given set of data to / from a database

General Education Outcomes Supported

None

Standard Practices

Topics List

- Object oriented design and methodology
- Database access with CRUD (Create, Retrieve, Update, and Delete)
- Web Services
- Multithreading
- Design Patterns
- Generics

Learning activities

- Assignments and Projects
- This course requires some in class, hands-on work and also additional hands-on work in a virtual or on-campus computer lab.

Assessments

Homework, Projects, Quizzes, and Exams

Grading guidelines

- A = 90-100%
- B = 80-89%
- C = 70-79%
- D = 60-69%
- F = 0-59%

Last Revision Date: Spring 2022