



GEMKO Information Group, Inc.

Information Systems Specialists

21st Century IBM i Developer Training Student Courses

Course 7 – Advanced SQL & RPG, The Knockout Punch

Length: 2 days

Delivery Method: Instructor led, group-paced, classroom delivery learning model with structured hands-on activities.

Course Description: This RPG programming training workshop takes the SQL/RPG relationship to the next level, such that RPG may become less the application driver and more the application supporter. Since SQL is a cross platform development environment, this will make your applications friendlier to other platforms in your network.

Course Objective: You will learn how to use SQL to extend your core business logic which is securely rooted in RPG. At the same time, you will be exposed to problem solving techniques that are building blocks to low risk modernization strategies.

Target Student: This course is designed for programmers who are proficient in both RPG IV and SQL, and are looking to shift some of the application load off RPG and/or modernize that application from its strategic core outward.

Prerequisites: Courses 1, 2, 3 or comparable experience.

Performance Based Objectives: Upon successful completion of this course, students will be able to:

- Architect database objects to be optimally flexible and compatible with most platforms
- Perform all database construction with SQL and its graphical tools
- Apply business rules using SQL
- Leverage RPG programs as SQL stored procedures
- Leverage RPG procedures as SQL functions
- Employ a more object oriented approach to data access in application programs

Course Content:

- Saying goodbye to DDS
- Creating your own data types
- Building your database the 21st century way
- Triggers and Constraints the SQL way
- User defined functions
- Case study – the standard cross reference
- Stored procedures
- Case study – A global item number change
- Performance considerations
- Comprehensive labs