

# BAKER COLLEGE STUDENT LEARNING OUTCOMES

#### **ITS3410A PowerShell Programming**

#### 3 Semester Hours

### **Student Learning Outcomes & Enabling Objectives**

- 1. Test and utilize system shells.
  - a. Demonstarte knowledge on how to run a command shell.
  - b. Navigate a file system at the command line.
  - c. Develop a custom shell environment.
  - d. Execute a script.
- 2. Summarize operating system command languages.
  - a. Construct scripts that are secure from unauthorized use.
  - b. Assemble non-interactive scripts for automated system maintenance tasks.
  - c. Assemble automated scripts used for system administration tasks.
  - d. Practice output formatting using different methods.
  - e. Differentiate logical and comparison operators.
- 3. Demonstrate basic programming concepts.
  - a. Demonstrate the use of an Integrated Development Environment (IDE) to code scripts.
  - b. Demonstrate string processing techniques.
  - c. Implement code scripts that perform system administrative tasks.
  - d. Explain how to logically group code for repeated use.
  - e. Describe debugging techniques for scripts.
  - f. Explain how using objects enhances scripting.

## **Big Ideas and Essential Questions**

#### **Big Ideas**

- Scripting
- Command shell
- Administration
- Automation

#### **Essential Questions**

1. Why is scripting beneficial?

- 2. What is the role of the command line in modern computing, even in light of graphical-based technologies?
- 3. How does automated system administration benefit an administrator?
- 4. What is the value of writing a script when a task can be done manually?
- 5. How does an administrator assure scripts are safe and secure?

These SLOs are approved for experiential credit.

Effective: Fall 2020