

Prepared by the Department of Business

Date of Departmental Approval: February 4, 2013

Date approved by Curriculum and Programs: February 13, 2013

Effective: Fall 2013

1. **Course Number:** BIT286
Course Title: PHP and MySQL for Web Development
2. **Description:** Students build on JavaScript, programming, database, HTML, DHTML, and CSS skills. This course introduces the web developer to the PHP scripting language and the MySQL database system and enables students to plan and develop end-to-end, database-driven web sites and applications.
3. **Student Learning Outcomes** (instructional objectives, intellectual skills):
Upon successful completion of this course, students are able to do the following.
 - Describe and use a web development platform and application architecture
 - Describe the differences and similarities between client and server in a web environment
 - Manage basic SQL commands and MySQL functions to create and maintain dynamic database data
 - Maintain, update, and revise a database with multiple tables
 - Demonstrate the ability to use PHP scripting to manipulate variables and arrays, set environmental variables, and validate forms
 - Access MySQL functions using PHP via HTML pages
 - Explain the object design model
 - Manipulate the DOM to separate design from content
 - Explain SESSION variables, and demonstrate their use
 - Describe the goals of security, including threats, authentication, and encryption
 - Describe security protocols and HTML encoding technologies relating to security
 - Explain methods for preventing cross site scripting attacks
 - Explain the dangers of SQL injection and methods of prevention
 - Apply server-side file management by manipulating directories and uploading files
 - Build a complete dynamic, data-driven website using PHP, MySQL, and a web development platform
4. **Credits:** 3 credits
5. **Satisfies General Education Requirement:** No
6. **Prerequisites:** GIT183 and GIT150
7. **Semester Offered:** Varies
8. **Suggested General Guidelines for Evaluation:** Students are evaluated with a combination of quizzes, exams, homework, and a project.