

SYLLABUS
PART I
EDISON STATE COMMUNITY COLLEGE
IMD 222S BACK-END WEB DEVELOPMENT
3 CREDIT HOURS

COURSE DESCRIPTION

Continuation of web development from a back-end perspective. Configuring a web server and installing the appropriate components will be covered. PHP as a server-side programming language and MySQL, a database platform, will be introduced and explored. Additional topics include web application internationalization, localization, security, authentication, personalization, social media integration, and e-commerce techniques. Prerequisite: IMD 121S with a grade of “C” or better or department approval. Recommended: CIS 213S and IMD 221S. Lab fee.

COURSE GOALS

The student will:

Bloom's Level		Program Outcomes
3	1. Use PHP to develop a web application from the back-end.	4, 5, 6, 7, 8
3	2. Use MySQL as a database for a website and access it using PHP.	4, 5, 6, 8
2	3. Describe the importance of security in a web application and how to implement it using PHP.	1, 3, 6
3	4. Use a team approach to develop a website from a back-end perspective.	1, 2, 3, 5, 6
4	5. Analyze program code and implement debugging and exception handling techniques.	4, 8
5	6. Produce, compile, and edit a web project for inclusion in an electronic portfolio.	5, 6, 8, 9
2	7. Discuss the importance of ethics in the web development industry.	1, 3

CORE VALUES

The Core Values are a set of principles that guide Edison State in creating its educational programs and environment. They will be reflected in every aspect of the College. Students' educational experiences will incorporate the Core Values at all levels, so that a student who completes a degree program at Edison State will not only have been introduced to each value, but will have had them reinforced and refined at every opportunity.

TOPIC OUTLINE

1. Getting started with Back-End Web Development and PHP
2. Working with relational databases and MySQL
3. Using PHP with a MySQL database
4. Using the MVC pattern to organize code
5. Testing and debugging PHP applications
6. Working with form data, strings, functions, objects, cookies, and sessions
7. Using code control statements
8. Creating and using arrays, functions, and objects
9. Using regular expressions, handling exceptions, and validating data
10. Designing a database
11. Using SQL to create and work with a database
12. Creating secure websites, sending email, and working with files, uploads, and images
13. Developing e-commerce websites