MISSOURI WESTERN STATE UNIVERSITY
COLLEGE OF LIBERAL ARTS AND SCIENCES

DEPARTMENT OF COMI'U'I'ER'SCIENCE, MATHEMATICS, AND PHYSICS

COURSE NUMBER: ACT 211
COURSE NAME: Internet Scripting

COURSE DESCRIPTION:
This course covers basic internet scripting technologies such as PHP, JavaScript, and ASP.

PREREQUISITES
A grade of C or higher in ACT 102 and CSC 184.

TEXT:
Learning PHP, MYSQL, JAVA.W/JQUERY, CSS+…, Nixon, Edition 4th 15, Ingram Pub,
ISN 9781491918661

COURSE OBJECTIVES :
- Understand the differences between static and dynamic programming
- Understand form processing in PHP.
- Connect to databases and transform data into display formats
- Incorporate good security practices into web page development
- Understand the DOM structure of web pages
- Use JavaScript to enhance display and form processing
- Use JQuery to manipulate page DOM.
- Use JavaScript and PHP together to create dynamic and secure web pages.

COURSE OUTLINE:
  I.Review of HTML and CSS elements needed for this course
  A. Lists
  B. Tables
  C. Forms
  II.PHP and Server Side Scripting
  A. Role of the server
  B. Structure of PHP
    1. Tags
    2. Execution
  C. Basic Concepts (assumes prior knowledge of basic Java Programming)
    1. Variables
    2. Data Types
    3. Control structures common with Java
    4. Control structures in PHP and not Java
    5. Functions
      a) Function Structure
      b) Local and Global variables
    6. Arrays

          a) Numeric Arrays
          b) Associative Arrays
      7. String Processing
          a) Basic operations
          b) Regular Expressions
      8. Form Processing
          a) Retrieving data from fields
          b) Sanitizing form data
          c) Data validation
  D. PHP and database
      1. Database Concepts
      2. Table organization
      3. Database Servers
      4. Connecting to remote databases
      5. Basic structure of select statements
      6. Managing returned data

III. Javascript
  A. Client-side scripting
  B. Variables
  C. Control Structures
  D. Java Classes and Objects
      1. Structure of Java Classes
      2. Instantiating Objects
      3. JSON for data exchange
  E. Use of Restful APIs.
  F. DOM structure
  G. JQuery
      1. Referencing JQuery from CDNs
      2. Production vs Development
      3. Manipulating DOM with JQuery
  H. AJAX (as time permits)