CSCE 242 – Web Applications

- **Credit Hours:** 3 hours
- **Contact Hours:** 3 lecture hours
- **Instructors:** Ms. Portia Plante, Dr. Jose Vidal
- **Required Textbooks:** N/A
- **Bulletin Description:** Web technologies to support client-server computing. Implementation of client-server applications.
- **Prerequisite:** C or better in CSCE 146
- **Required Course** in CIS
- **Course Outcomes:** Students will be able to:
  1. Understand the fundamentals of source control
  2. Create an environment for successful website development
  3. Create websites using HTML, CSS, and JavaScript
  4. Apply object-oriented software development to a JavaScript environment
  5. Gather and parse information contained in JSON
  6. Create server side applications
  7. Apply the fundamentals of client and server side computing and create applications which exchange data

- **Student Outcomes addressed by course**

<table>
<thead>
<tr>
<th>Program</th>
<th>Student Outcomes Addressed</th>
</tr>
</thead>
<tbody>
<tr>
<td>Computer Engineering</td>
<td>N/A</td>
</tr>
<tr>
<td>Computer Information Systems</td>
<td>2, 6</td>
</tr>
<tr>
<td>Computer Science</td>
<td>N/A</td>
</tr>
</tbody>
</table>

- **Topics covered (is this accurate)**
  1. Source Control (1 week)
  2. Website Markup (HTML) (1 week)
  3. Website Styling (CSS) (1 week)
  4. Client Side Scripting (JavaScript) (5 weeks)
    a. Language Fundamentals
    b. Interaction between JavaScript, HTML, & CSS
  5. Parse information from JSON (1 week)
  6. Server Side Scripting using Node.js, Express, and MongoDB (3 weeks)
    a. Language Fundamentals
    b. Interaction between client and server side scripts