1. **Catalog Description of the Course.**
   
   **IT 280 WEB PROGRAMMING (3)**
   
   Prerequisites: IT 151 and MATH 300
   Three hours of lecture in the lab
   
   This course provides an overview of the many languages and techniques used in web programming. This includes Java, JavaScript, PHP, Python, Perl, JSP and ASP, as well as database query languages and XML. Sample applications are built for dynamic web pages and web sites. No credit given towards Computer Science degree.

2. **Mode of Instruction.**

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<th>Units</th>
<th>Hours per Unit</th>
<th>Benchmark Enrollment</th>
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<td>Lecture</td>
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<td>Activity</td>
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3. **Justification and Learning Objectives.**

   Justification: BSIT required course.
   
   Learning Objectives:
   
   Students who successfully complete this course will be able to:
   1. Be able to analyze the components of a web software system.
   2. Be able to identify the software components of a web system.
   3. Be able to program basic functions in Java, JavaScript, one other scripting language.
   4. Be able to program a basic web page database interface.
   5. Be able to program a web page to gather information from the user.
   6. Be able to create an XML document for a specific application.
   7. Be able to distinguish the different data types on a web form.
   8. Be able to identify the use of OO structures and their use.
   9. Understand the fundamental role XML is playing in industry
   10. Understand the fundamental differences between DTDs and Schema.

4. **Is this a General Education Course?**

   No.

5. **Course Content in Outline Form.**

   Topics:
   1. Perl.
   2. Client Side Scripting
   4. Server Side Scripting
   5. PHP
   6. ASP
   7. Database fundamentals.
   8. XML
   9. XML Document Type Definitions.
   10. MYSQL

6. **Cross-listed Courses.**

   None.

7. **References.**

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<th>Author</th>
<th>Publisher</th>
<th>Year</th>
<th>ISBN</th>
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<tr>
<td>Internet &amp; World Wide</td>
<td>Harvey M. Deitel, Paul</td>
<td>Pearson</td>
<td>2003</td>
<td>0131450913</td>
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<tr>
<td>How to Program</td>
<td>J. Deitel, Andrew B. Goldberg</td>
<td>Education</td>
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<td>Core Web Programming</td>
<td>Marty Hall, Larry Brown</td>
<td>Prentice Hall</td>
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<td>Programming the World</td>
<td>Robert W. Sebesta</td>
<td>Pearson</td>
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<td>Wide Web</td>
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8. **Faculty Qualified to Teach This Course.**

   Qualified Faculty: Smith, Wolfe

9. **Frequency.**

   Projected semesters to be offered: Fall, Spring

10. **New Resources Required.**

    a. New Equipment needs: Use of existing computer lab.
    b. New Library needs: none
    c. New Space/Facilities needs: none

11. **Program Modifications.**

    None.

12. **Proposer of Course.**

    Proposer: Smith, Wolfe  Date: 7/13/2004