1. **Course number and name**  
   **CSC 667: Internet Application Design and Development**

2. **Credits and contact hours**  
   3 credits  
   Contact hours: 150 minutes of lecture sessions /week

3. **Instructor’s or course coordinator’s name**  
   Course coordinator: Ilmi Yoon, Professor of Computer Science

4. **Text book, title, author, and year**

   a. **other supplemental materials**
      - Lecture slides

5. **Specific course information**
   a. **brief description of the content of the course (catalog description)**
      The focus of this course is to teach the principles of the technologies that the Web is based upon. It will cover Client-Server architecture, Extensible Markup Language (XML), HyperText Transfer Protocol (HTTP), then client-side applications (JavaScript and Java Web Start/JNLP), programming languages for server-side applications (Python, Java Server Pages and Servlets), and advanced techniques and topics on the WWW.
   
   b. **prerequisites or co-requisites**
      a grade of C or better in CSC 413 or consent of instructor.
   
   c. **indicate whether a required, elective, or selected elective course in the program**
      Elective for Computer Engineering.

6. **Specific goals for the course**
   a. **specific outcomes of instruction, ex. The student will be able to explain the significance of current research about a particular topic.**
      Students completing the course successfully will be able to
      
      a. Understand how Web Server works (client-server architecture, HTTP protocols, caching and authentication) and be able to build one.
b. Understand how E-commerce applications are developed using JSP, JDBC, and MySQL and be able to build one.
c. Be able to design, document and develop a large application as a team project.

b. explicitly indicate which of the student outcomes listed in Criterion 3 or any other outcomes are addressed by the course.
Course addresses ABET Student Outcome(s): a, b, c, e, j, k.

7. Brief list of topics to be covered

- XML and its applications
- Web Servers & HTTP Protocol
- CGI using Perl or Python
- Web Server Project Discussion
- Client-side scripting using JavaScript
- Web Application Development Configuration using Tomcat, MySQL and Eclipse JSP Design of E-commerce applications
- Cookie, Session, JDBC, and Tag library
- Web Services
- Data Exploration using Semantic Web
- JLNLP, J2ME and Wireless applications