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*

    Web Application Architecture, Leon Shklar & Richard Rosen, Wiley Publications, current edition.

    Using Java Server Pages and Servlets, Special Edition, Mark Wutka, QUE Publications.

    Advanced JA V A: Internet Applications, current edition, Art Gittleman, Scott & Jones Publications.

    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

- JLNP, J2ME and Wireless applications