ESCUELA SUPERIOR POLITÉCNICA DEL LITORAL
COURSE SYLLABUS
WEB APPLICATIONS DEVELOPMENT

Program: Computer Science

1. Course number and name

CCPG1010 - WEB APPLICATIONS DEVELOPMENT

2. Credits and contact hours

3 credits and 4 contact hours

3. Instructor's course or coordinator's name

ALLAN ROBERTO AVENDAÑO SUDARIO

4. Text book, tittle, author, and year

*Purewal, Semmy. Learning web app development (First edition.;)

a.Other supplemental materials

*Jennifer Niederst Robbins. Learning Web Design: A Beginner's Guide to HTML, CSS, JavaScript, and Web Graphics (Paperback; 2012-08-21)

5. Specific course information

a.   Brief description of the content of the course (catalog description)

This course introduces to the theoretical and practical experience ondesigning and implementing web applications by fulfilling current programming standards and best coding practices into maintainability and scalability. Practices are acompassed to design and implement web applications that respond to asynchronous requirements into client-servermodel. Furthermore, these practices consider model-view-controllerpattern design for splitting business logic among user interface. Finally, on this course, each concept is analyzed independently from any web platform, in order to facilitate the autonomous learning process into new technologies and frameworks.

b.   Prerequisites

DATABASE SYSTEMS - TICG1001

SOFTWARE DESIGN - CCPG1009

c.   This course is a: Required

6. Specific goals for the course

a.   Specific outcomes of instruction

1.- To implement web applications by the use of standards in the presentation and functionality of the client interface.

2.- To design web applications with asynchronous requirements for the improvement of the user experience.

3.- To apply the pattern model-view-controller during the web application development in order to accelerate maintenance process.

4.- To explain web sessions and secure communication channels concepts by managing states on the server for the user information management in a web application.

b.   Explicity indicate which of the student outcomes listed in Criterion 3 or any other outcomes are addressed by the course

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7. Brief list of topics to be covered

1.- Introduction

2.- Structure for a web document

3.- Style for a web document

4.- Adaptive Web Design

5.- Web client programming

6.- Web server programming

7.- Web services

8.- State management