SYLLABUS

DIVISION: Business and Engineering Technology   **REVISED:** Fall 2015

CURRICULA IN WHICH COURSE IS TAUGHT: IST curricular or elective

COURSE NUMBER AND TITLE: **ITP 140 – Client Side Scripting**

CREDIT HOURS: 3 **HOURS/WK LEC:** 3 **HOURS/WK LAB:** 0 **LEC/LAB COMB:** 3

I.   **CATALOG DESCRIPTION:** Provides instruction in fundamentals of Internet application design, development, and deployment using client side scripting language(s).

II.   **RELATIONSHIP OF THE COURSE TO CURRICULA OBJECTIVES:**
   •   Acquire the fundamentals of web client application design, development, and deployment using client-side scripting language(s) and technologies.
   •   Use XHTML and JavaScript in web application development.
   •   Learn the basic concepts of structured programming in a client-side language
   •   (JavaScript): variables, functions, control statements, expressions

III.   **REQUIRED BACKGROUND:**   ITD 110, ITD 210

IV.   **COURSE CONTENT:**
   •   Introduction to using XHTML and JavaScript in web application development.
   •   Basic concepts of structured programming in a client-side language (JavaScript): variables, functions, control statements, expressions.
   •   Basic concepts of object oriented programming in a client-side language (JavaScript): objects, properties, methods, and the Document Object Model.
   •   Using a client-side language (JavaScript) to develop interactive web content: forms, style sheets, data validation, and animation.

V.   **THE FOLLOWING GENERAL EDUCATION OBJECTIVES WILL BE ADDRESSED IN THIS COURSE.**
   STUDENTS WILL:
   __**X**___Communications   ___**X**__Computational and Computer Skills

   _____Learning Skills   _____Understanding Culture and Society

   __**X**__Critical Thinking   ___**X**____Understanding Science and Technology

_____Interpersonal Skills and   _____Wellness
        Human Relations

VI. LEARNER OUTCOMES   **VII. EVALUATION**

Introduction to using HTML 5, CSS3 and JavaScript in web application development • Terminology • HTML 5 and CSS 3 standards • Scripting language standards • Theory of web architecture • Implications for application design	Lab exercises projects
Basic concepts of structured programming in a client-side language (JavaScript) • Defining and using variables, data types, and operators • Defining and calling functions • Using Flow control statements • Using Mathematical, String, and Date expressions and evaluations	Lab exercises projects
Basic concepts of object oriented programming in a client-side language (JavaScript) • Essential OOP terminology • Understanding and using properties • Creating and Using Objects • Event handling • Understanding and using The JavaScript Object Model to manipulate the web browser • Understand and use the Document Object Model	Lab exercises projects

Using a client-side language (JavaScript) to develop interactive web content: forms, applets, data validation • Working with the Window Object • Creating and using frames • Frame Communications • Creating and using forms • Persistence and Cookies	Lab exercises projects