NVCC COLLEGE-WIDE COURSE CONTENT SUMMARY

ITP 140
Client Side Scripting (4 cr.)

Course Description

Provides instruction in fundamentals of Internet application design, development, and deployment using client side scripting language(s). Lecture 4 hours per week.

Recommended Co-requisites or Pre-requisites

ITP 100 and ITD 110

Course Objectives

Upon completion of this course, the student will be able to:

- 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

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

Student Learning Outcomes

Introduction to using XHTML and JavaScript in web application development

- Terminology
- XHTML standards
- Scripting language standards
- Theory of web architecture
- Implications for application design

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

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

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
- Form interaction with databases and CGI
- Persistence and Cookies
- Cascading Style Sheets with JavaScript for Animation