

## **NOVA COLLEGE-WIDE COURSE CONTENT SUMMARY ITD 110 – WEB PAGE DESIGN I (3 CR.)**

### **Course Description**

Stresses a working knowledge of web site designs, construction, and management using HTML or XHTML. Includes headings, lists, links, images, image maps, tables, forms, and frames. Lecture 3 hours per week.

### **General Course Purpose**

Introduces students to the development of web sites while coding HTML and CSS. Students will learn site design, construction, and management using HTML and CSS. Students will not be using automated code generators in this course.

### **Course Prerequisites/Corequisites**

None

### **Course Objectives**

Upon completing the course, the student will be able to:

- a) Describe and use current web page creation technologies
- b) Use text editors to write HTML and CSS code
- c) Discuss, recognize, and apply the elements of good design
- d) Describe and use common web servers

### **Major Topics to be Included**

- a) Getting started with HTML and CSS
- b) Formatting text
- c) Creating hypertext links
- d) Using color and graphics
- e) Using tables
- f) Creating user-friendly navigation
- g) Working with HTML forms
- h) Working with Cascading Style Sheets
- i) Designing HTML and CSS for multiple devices (Responsive Design)
- j) Incorporating audio and video elements
- k) Publishing to a web server using FTP (File Transfer Protocol)
- l) Understanding the implications of copyrights on web design
- m) Knowledge of the basics of accessibility as it relates to web design

### **Student Learning Outcomes**

#### **Getting Started with HTML**

- Describe the history of the WWW and HTML
- Use basic HTML syntax correctly
- Create headers, paragraphs, and lists
- Display HTML document in Web browser

#### **Working with Cascading Style Sheets**

- Distinguish the proper type of stylesheet to implement
- Use inline styles

- Use embedded style sheets
  - Use external style sheets
- Formatting
- Use font styles to change font size, color, and face
  - Use styles to change text, background and link colors
  - Use color names and values in specifying formats
- Creating Links
- Identify and use relative and absolute pathnames
  - Link to a document in the same directory
  - Link to a URL
  - Link to a section of a document
  - Link to e-mail addresses
  - Link to folders
  - Create a link using an image
  - Create a link which will open in a new browser tab/window
- Working with graphics
- Demonstrate the use of GIF, JPG and PNG files
  - Demonstrate the use of image properties and attributes as they relate to alignment, image size, spacing, ALT attributes, and borders
  - Explain the difference between client-side and server-side image maps
  - Create image map hotspots
- Using Tables
- Demonstrate an understanding of how tables affect content layout
  - Effectively use tables to create a page layout
  - Create pages using nested tables
  - Demonstrate the ability to make cells span rows or columns
  - Identify the tags required to create a table
  - Demonstrate the ability to define cell size, spacing, and padding
- Creating User Friendly Navigation
- Discuss and identify the basics of navigational design
  - Produce multiple versions of navigational menus
  - Select the best navigational design for a specific purpose
- Working with HTML Forms
- Create forms using all form objects
  - Create forms using the button, submit, and reset button tags
  - Explain server-side processing
- Design HTML and CSS for Multiple Devices
- Identify the types of devices in use and how to adjust the design appropriately
  - Apply appropriate designs for each device identified
- Incorporate Audio and Video
- Describe the common types of web audio
  - Incorporate audio into the site design
  - Describe the common types of web video
  - Incorporate video in the site design
- Publishing using FTP (File Transfer Protocol)
- Upload files to a web server
  - Manage folders and files on a web server

### **Required Time Allocation per Topic**

To standardize the core topics of ITD 110 so that a course taught at one campus is equivalent to the same

course taught at another campus, the following student contact hours per topic are required. The topics do not need to be followed sequentially. Many topics are taught best as an integrated whole, often revisiting the topic several times, each time at a higher level. There are normally 45 student-contact-hours per semester for a three-credit course. (This includes 14 weeks of instruction and does not include the final exam week so  $14 \times 3.2 = \sim 45$  hours. Sections of the course that are given in alternative formats from the standard 15 week session still meet for the same number of contact hours.) The final exam time is not included in the timetable. The last category, Other Optional Content, leaves time for an instructor to tailor the course to special needs or resources.

TOPIC	HOURS	PERCENT
Getting Started with HTML	3	7
Formatting	2	4
Creating Links	4	8
Working with Graphics	3	7
Using Tables	3	7
Creating User Friendly Navigation	3	7
Working with HTML Forms	4	9
Working with Cascading Stylesheets	9	20
Design HTML and CSS for multiple devices (Responsive Design)	3	7
Incorporate audio and video elements	3	7
Publishing and FTP	2	4
Other Optional Content (Copyright, Accessibility)	3	7
Quizzes and Exams	3	6
TOTAL	45	100