## ITT Technical Institute SD1240

# Creating Websites Using HTML and CSS Onsite and Online Course

### **SYLLABUS**

Credit hours: 4.5

Contact/Instructional hours: 56 (34 Theory Hours, 22 Lab Hours)

Prerequisite(s) and/or Corequisite(s):

Prerequisite: NT1110 Computer Structure and Logic or equivalent

**Course Description:** 

This course examines functions of Websites for mobile and desktop devices, and entrylevel skills used to create such sites using HTML and CSS (Cascading Style Sheets) technologies.

#### **COURSE SUMMARY**

#### COURSE DESCRIPTION

This course examines functions of Websites for mobile and desktop devices, and entry-level skills used to create such sites using HTML and CSS (Cascading Style Sheets) technologies.

#### MAJOR INSTRUCTIONAL AREAS

- 1. Web protocols
- 2. Domain names
- Web browsers and Web servers
- 4. Hypertext Markup Language (HTML)
- Images
- 6. Extensible Hypertext Markup Language (XHTML)
- 7. Cascading Style Sheets (CSS)
- 8. Tables and forms
- 9. Web hosts

#### **COURSE LEARNING OBJECTIVES**

By the end of this course, you should be able to:

- Analyze the reasons for the wide acceptance of the Internet and World Wide Web (WWW).
- 2. Use HTML to create Web pages.
- 3. Use Cascading Style Sheets (CSS) to format Web pages and content.
- 4. Add visual elements and graphics on Web pages.
- 5. Apply Web site design practices to analyze Web site design.
- 6. Use tables to organize information and configure page layout.
- 7. Add forms to Web pages.
- 8. Demonstrate knowledge of how to publish and publicize Web pages and sites.

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#### **COURSE OUTLINE**

#### MODULE 1: INTRODUCTION TO HTML AND INTERNET

#### COURSE LEARNING OBJECTIVES COVERED

- Analyze the reasons for the wide acceptance of the Internet and World Wide Web (WWW).
- Use HTML to create Web pages.

#### TOPICS COVERED

- Evolution of Internet
- Internet, Intranet, and Extranets
- Standards and the World Wide Web
- Markup Languages
- Basics of HTML and XHTML
- Different Operations in XHTML

MODULE LEARNING ACTIVITIES	GRADE D	OUT-OF- CLASS TIME
Reading: Felke-Morris, T., Chapters 1 and 2	No	6 hr.
Reading: ITT Tech Virtual Library> School of Study> School of Information		
Technology> Databases> AccessScience> Computing & Information		
Technology> Computing-general:		
• Internet		
World Wide Web	No	2 hr.
Lesson: Study the lesson for this module.	No	1.5 hr.
<b>Discussion:</b> Participate in the discussion titled "Modern Advances in the		
Internet and World Wide Web."	Yes	N/A
Lab: Complete the lab titled "Analyze the World Wide Web and XHTML."	Yes	N/A
<b>Project:</b> Read and begin the project.	No	0.5 hr.

Total Out-Of-Class Activities: 10 Hours

#### **MODULE 2: INTRODUCTION TO CSS**

#### COURSE LEARNING OBJECTIVES COVERED

- Use Cascading Style Sheets (CSS) to format Web pages and content.
- Add visual elements and graphics on Web pages.

#### TOPICS COVERED

- Overview of CSS
- Use of Color on Web Pages
- External Style Sheets
- Use of Different Graphics
- XHTML Images

MODULE LEARNING ACTIVITIES	GRADE D	OUT-OF- CLASS TIME
Reading: Felke-Morris, T., Chapters 3 and 4	No	7 hr.
<b>Lesson:</b> Study the lesson for this module.		2 hr.
<b>Discussion</b> : Participate in the discussion titled "Accessibility and Visual		
Elements."	Yes	1.5 hr.
Quiz: Prepare for Quiz 1.	No	2 hr.
Lab 1: Complete the lab titled "CSS Code."		N/A
Lab 2: Complete the lab titled "Work with Images."		N/A
Quiz: Take Quiz 1.		N/A
<b>Project:</b> Continue work on Project Part 1.	No	3 hr.

Total Out-Of-Class Activities: 15.5 Hours

#### MODULE 3: WEB DESIGN

#### COURSE LEARNING OBJECTIVES COVERED

• Apply Web site design practices to analyze Web site design.

#### TOPICS COVERED

- Web Site Organization
- Web Site Design Principles
- Page Layout Design Techniques
- Graphic Design
- Best Practices for Web Site Design

MODULE LEARNING ACTIVITIES	GRADE D	OUT-OF- CLASS TIME
Reading: Felke-Morris, T., Chapter 5	No	3.5 hr.
Reading: ITT Tech Virtual Library> School of Study> School of Information		
Technology> Databases> Books24x7> Business Topics> Marketing & Sales>		
Online Marketing> Poor Richard's Web Site, Second Edition:		
Chapter 6: Designing Your Web Site		
Chapter 7: An Introduction to HTML	No	2.5 hr.
<b>Lesson:</b> Study the lesson for this module.		2 hr.
Quiz: Prepare for Quiz 2.		2 hr.
<b>Discussion:</b> Participate in the discussion titled "Best Practices of Web		
Design."		1.5 hr.
Lab 1: Complete the lab titled "Site Mapping Practical Situations."		N/A
Lab 2: Complete the lab titled "Wireframe Page Layouts."		N/A
Quiz: Take Quiz 2.		N/A
<b>Project:</b> Continue work on Project Part 1.		4 hr.

Total Out-Of-Class Activities: 15.5 Hours

#### **MODULE 4: APPLICATION OF CSS**

#### COURSE LEARNING OBJECTIVES COVERED

• Use Cascading Style Sheets (CSS) to format Web pages and content.

#### TOPICS COVERED

- CSS Page Layout Overview
- The Box Model
- CSS Debugging Tips
- CSS Pseudo-Classes and Links
- The Cascade

MODULE LEARNING ACTIVITIES	GRADE D	OUT-OF- CLASS TIME
Reading: Felke-Morris, T., Chapters 6 and 7	No	7 hr.
Lesson: Study the lesson for this module.	No	2 hr.
<b>Discussion:</b> Participate in the discussion titled "Ideation for the Web Site		
Design Process."	Yes	1.5 hr.
Lab 1: Complete the lab titled "Advanced Practice with CSS."		N/A
Lab 2: Complete the lab titled "More CSS on Lists and Links."		N/A
Project: Submit Project Part 1.		3 hr.
Quiz: Prepare for Quiz 3.	No	2 hr.

Total Out-Of-Class Activities: 15.5 Hours

#### **MODULE 5: APPLICATION OF XHTML**

#### COURSE LEARNING OBJECTIVES COVERED

• Add forms to Web pages.

#### TOPICS COVERED

- Table Page Layout in XHTML
- Use of Tables on Web Pages
- Use of Forms in XHTML
- Form Enhancements
- Server Side Processing

MODULE LEARNING ACTIVITIES	GRADE D	OUT-OF- CLASS TIME
Reading: Felke-Morris, T., Chapters 8 and 9	No	7 hr.
<b>Lesson:</b> Study the lesson for this module.	No	1.5 hr.
Lab 1: Complete the lab titled "Table Creation."	Yes	N/A
Lab 2: Complete the lab titled "Form Configuration."	Yes	N/A
Quiz: Take Quiz 3.	Yes	N/A
Project: Submit Project Part 2.	Yes	5 hr.
Final Exam: Prepare for the final exam.	No	5 hr.

Total Out-Of-Class Activities: 18.5 Hours

#### MODULE 6: FINAL WEB SITE DEVELOPMENT

#### COURSE LEARNING OBJECTIVES COVERED

- Analyze the reasons for the wide acceptance of the Internet and World Wide Web (WWW).
- Use HTML to create Web pages.
- Use Cascading Style Sheets (CSS) to format Web pages and content.
- Add visual elements and graphics on Web pages.
- Apply Web site design practices to analyze Web site design.
- Use tables to organize information and configure page layout.
- Add forms to Web pages.
- Demonstrate knowledge of how to publish and publicize Web pages and sites.

#### **TOPICS COVERED**

- System Development Life Cycle
- Overview of Domain Name
- Publish Web Pages

MODULE LEARNING ACTIVITIES	GRADE D	OUT-OF- CLASS TIME
Reading: Felke-Morris, T., Chapter 10	No	2 hr.
Reading: ITT Tech Virtual Library> School of Study> School of Information		
Technology> Databases> Books24x7> Business Topics> Marketing & Sales>		
Online Marketing> Poor Richard's Web Site, Second Edition:		
Chapter 4: Finding a Web Host		
Chapter 5: All About Domain Names		
Chapter 16: Registering Your Web site	No	2 hr.
Lesson: Study the lesson for this module.		2 hr.
Lab: Complete the lab titled "Web Hosting Data and HTML/CSS		N/A
Application."		
Final Exam: Take the final exam.	Yes	N/A

Total Out-Of-Class Activities: 6 Hours

#### **EVALUATION AND GRADING**

#### **EVALUATION CRITERIA**

The graded assignments will be evaluated using the following weighted categories:

CATEGORY	WEIGHT
Discussion	15%
Lab	30%
Quiz	15%
Project	20%
Final Exam	20%
TOTAL	100%

#### **GRADE CONVERSION**

The final grades will be calculated from the percentages earned in the course, as follows:

ADE	PERCENTA
	GE
(4.0	90–100%
)	
(3.5	85–89%
)	
(3.0	80–84%
)	
(2.5	75–79%
)	
(2.0	70–74%
)	
(1.5	65–69%
)	
(1.0	60–64%
)	
	(4.0 ) (3.5 ) (3.0 ) (2.5 ) (2.0 ) (1.5

F	(0.0)	<60%
	)	

#### LEARNING MATERIALS AND REFERENCES

#### REQUIRED RESOURCES

#### COMPLETE TEXTBOOK PACKAGE

- Felke-Morris, T. (2011). Web Development and Design Foundations with XHTML (Custom 5th ed.). Boston, MA: Addison-Wesley.
- Powell, Wendy (2014). Creating Websites Using HTML and CSS Student Lab Manual (Custom). Boston, MA: Pearson Custom.

#### RECOMMENDED RESOURCES

- ITT Tech Virtual Library (accessed via Student Portal | <a href="https://studentportal.itt-tech.edu">https://studentportal.itt-tech.edu</a>)
  - School of Study> School of Information Technology> Databases> AccessScience>
     Computing & Information Technology> Computing-general:
    - Internet
    - World Wide Web
  - School of Study> School of Information Technology> Databases> Books24x7> Business
     Topics> Marketing & Sales> Online Marketing:
    - Kent, Peter. Poor Richard's Web Site, Second Edition. Top Floor Publishing.
       © 2000.
  - School of Study> School of Information Technology> Databases> Books24x7> IT and
     Technical Topics> Internet & Web Development> HTML/DHTML/iHTML:
    - Schafer, Steven M. HTML, XHTML, and CSS Bible, Fifth Edition. John Wiley
       & Sons. © 2010.
    - Duckett, Jon. Beginning Web Programming with HTML, XHTML, and CSS, Second Edition. Wrox Press. © 2008.

#### Other References

- Designing For The Future Web: <a href="http://www.smashingmagazine.com/2011/03/29/designing-for-the-future-web/">http://www.smashingmagazine.com/2011/03/29/designing-for-the-future-web/</a>
- How to Architect a Better Site-Map: <a href="http://webdesign.tutsplus.com/articles/how-to-architect-a-better-site-map--webdesign-14180">http://webdesign.tutsplus.com/articles/how-to-architect-a-better-site-map--webdesign-14180</a>
- How to Choose a Small Business Web Hosting Service: http://www.pcmag.com/article2/0,2817,2426600,00.asp

- o Learning Web Design Process: <a href="http://www.utexas.edu/learn/designprocess/structure.html">http://www.utexas.edu/learn/designprocess/structure.html</a>
- The Best Web Hosting Services: <a href="http://www.businessnewsdaily.com/2494-web-hosting-services.html">http://www.businessnewsdaily.com/2494-web-hosting-services.html</a>
- The Future of Web Design is in Our Hands: <a href="https://uxmag.com/articles/the-future-of-web-design-is-in-our-hands">https://uxmag.com/articles/the-future-of-web-design-is-in-our-hands</a>
- Web Design: 20 Hottest Trends To Watch Out For In 2013: http://www.hongkiat.com/blog/web-design-trend-2013/
- Web-based Mobile Apps of the Future Using HTML 5, CSS and Javascript: http://www.htmlgoodies.com/beyond/article.php/3893911
- Why Choosing the Best Web Hosting Is Crucial for Your Business:
   <a href="http://www.huffingtonpost.com/syed-balkhi/why-choosing-the-best-web">http://www.huffingtonpost.com/syed-balkhi/why-choosing-the-best-web</a> b 3940838.html
- Why You Should Build A Sitemap Before Designing Your Site: http://blog.kissmetrics.com/build-a-sitemap/

#### INSTRUCTIONAL METHODS AND TEACHING STRATEGIES

The curriculum employs a variety of instructional methods that support the course objectives while fostering higher cognitive skills. These methods are designed to encourage and engage you in the learning process in order to maximize learning opportunities. The instructional methods include but are not limited to lectures, collaborative learning options, use of technology, and hands-on activities.

To implement the above-mentioned instructional methods, this course uses several teaching strategies, such as lessons and hands-on labs. Your progress will be regularly assessed through a variety of assessment tools including discussion, lab, quiz, project, and final exam.

#### **OUT-OF-CLASS WORK**

For purposes of defining an academic credit hour for Title IV funding purposes, ITT Technical Institute considers a quarter credit hour to be the equivalent of: (a) at least 10 clock hours of classroom activities and at least 20 clock hours of outside preparation; (b) at least 20 clock hours of laboratory activities; or (c) at least 30 clock hours of externship, practicum or clinical activities. ITT Technical Institute utilizes a "time-based option" for establishing out-of-class activities which would equate to two hours of out-of-class activities for every one hour of classroom time. The procedure for determining credit hours for Title IV funding purposes is to divide the total number of classroom, laboratory, externship, practicum and clinical hours by the conversion ratios specified above. A clock hour is 50 minutes.

A credit hour is an artificial measurement of the amount of learning that can occur in a program course based on a specified amount of time spent on class activities and student preparation during the program course. In conformity with commonly accepted practice in higher education, ITT Technical Institute has institutionally established and determined that credit hours awarded for coursework in this program course (including out-of-class assignments and learning activities described in the "Course Outline" section of this syllabus) are in accordance with the time-based option for awarding academic credit described in the immediately preceding paragraph.

#### ACADEMIC INTEGRITY

All students must comply with the policies that regulate all forms of academic dishonesty or academic misconduct. For more information on the academic honesty policies, refer to the Student Handbook and the School Catalog.

#### INSTRUCTOR DETAILS

Instructor Name	
Office Hours	
Contact Details	

(End of Syllabus)