

**ITT Technical Institute**

**SD3140**

**Introduction of Web Interface Design  
Onsite and Online Course**

**SYLLABUS**

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**Credit hours:** 4.5


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

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

Prerequisite: SD1340 Creating Websites Using HTML5, CSS3 and JavaScript or equivalent

**Course Description:**

This course examines principles and techniques used to design functional and user-friendly Web interfaces for a variety of mobile and desktop applications.



## COURSE SUMMARY

### COURSE DESCRIPTION

This course examines principles and techniques used to design functional and user-friendly Web interfaces for a variety of mobile and desktop applications.

### MAJOR INSTRUCTIONAL AREAS

1. Contextual Inquiry
2. Requirements Identification
3. Human Factors Considerations
4. Functional Design Specifications
5. User Interface Design Principles and Considerations
6. Storyboards and Paper Prototyping
7. Interactive Web Site Development
8. Usability Testing
9. Internationalization and Accessibility

### COURSE LEARNING OBJECTIVES

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

1. Apply design principles to create effective graphical and Web user interface.
2. Identify the user and client requirements to create good interface and screen design.
3. Design and organize graphical screens and Web pages to encourage fast and most accurate execution of features.
4. Execute an approved design study in the intended Web format.
5. Refine a Web site for usability by performing the user interface design process and interface development.
6. Prepare a usability test plan for a given Web site.

## COURSE OUTLINE

### MODULE 1: UNDERSTANDING WEB INTERFACE DESIGN

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**COURSE LEARNING OBJECTIVES COVERED**

- Apply design principles to create effective graphical and Web user interface.

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**TOPICS COVERED**

- Features of a Good User Interface
- Graphical User Interface
- Interaction Styles
- Web User Interface
- Web Page versus Application Design
- Principles of User Interface Design

MODULE LEARNING ACTIVITIES	GRADE D	OUT-OF- CLASS TIME
<b>Reading:</b> Galitz, W. O., Part 1: Chapter 1, pp. 3–12 and Chapter 2, pp. 13–16 and 28–58	No	5 hr
<b>Reading:</b> ITT Tech Virtual Library> Basic Search> <i>Handbook of Human Factors in Web Design</i> > Chapter 3, Section 3.3.3, pp. 45–48	No	0.5 hr
<b>Lesson:</b> Study the lesson for this module.	No	1.5 hr
<b>Discussion:</b> Participate in the discussion titled “Good Interface Designs.”	Yes	N/A
<b>Lab:</b> Complete the lab titled “Redesigning a Web Site.”	Yes	N/A
<b>Project:</b> Read and begin project.	No	1 hr

Total Out-Of-Class Activities: 8 Hours

## MODULE 2: INTRODUCTION TO WEB DESIGN

### COURSE LEARNING OBJECTIVES COVERED

- Identify the user and client requirements to create good interface and screen design.

### TOPICS COVERED

- People Interaction with Computers
- Human Considerations in Web Design
- Design of Business Systems
- Business Definition and Requirement Analysis
- Basic Business Functions
- Design Standards and Style Guides
- System Training and Documentation Needs

MODULE LEARNING ACTIVITIES	GRADE D	OUT-OF- CLASS TIME
<b>Reading:</b> Galitz, W. O., Part 2: Step 1, pp. 71–75 and pp. 87–102, Step 2, pp. 104–126, and Step 3, pp. 127–132	No	5.5 hr
<b>Lesson:</b> Study the lesson for this module.	No	1.5 hr
<b>Quiz:</b> Prepare for Quiz 1.	No	2 hr
<b>Discussion:</b> Participate in the discussion titled “Accessibility or Readability.”	Yes	N/A
<b>Analysis:</b> Submit the analysis titled “Analyzing Web Site Requirements.”	Yes	3.5 hr
<b>Lab:</b> Complete the lab titled “Improving a Web Site.”	Yes	N/A
<b>Quiz:</b> Take Quiz 1.	Yes	N/A
<b>Project:</b> Continue work on Project Part 1.	No	3 hr

Total Out-Of-Class Activities: 15.5 Hours

## MODULE 3: EXPLORING WEB DESIGN

### COURSE LEARNING OBJECTIVES COVERED

- Apply design principles to create effective graphical and Web user interface.
- Identify the user and client requirements to create good interface and screen design.
- Design and organize graphical screens and Web pages to encourage fast and most accurate execution of features.

### TOPICS COVERED

- Principles of Good Interface and Screen Design
- Meaningful Organization of Web Elements
- Web Navigation and Flow
- Interaction Devices—Input and Output Devices
- Clear Web Site Text and Messages
- Window Title, Conventions, and Sequence Control Guidance
- Content and Text for Web Pages

MODULE LEARNING ACTIVITIES	GRADE D	OUT-OF- CLASS TIME
<b>Reading:</b> Galitz, W. O., Part 2: Step 3, pp. 133–146, Step 6, pp. 423–441, and Step 8, pp. 563–585	No	6.5 hr
<b>Reading:</b> ITT Tech Virtual Library> Basic Search> <i>Handbook of Human Factors in Web Design</i> > Chapter 8, pp. 154–169	No	2 hr
<b>Lesson:</b> Study the lesson for this module.	No	2 hr
<b>Lab 1:</b> Complete the lab titled “Reviewing Web Site Design.”	Yes	N/A
<b>Lab 2:</b> Complete the lab titled “Designing a Registration Page.”	Yes	N/A
<b>Analysis:</b> Submit the analysis titled “Assessing Web Site Accessibility.”	Yes	3.5 hr
<b>Project:</b> Submit Project Part 1.	Yes	3 hr

Total Out-Of-Class Activities: 17 Hours

## MODULE 4: WORKING WITH DIFFERENT ELEMENTS

### COURSE LEARNING OBJECTIVES COVERED

- Execute an approved design study in the intended Web format.

### TOPICS COVERED

- Form Fill-In
- Direct Manipulation
- Structures, Functions, Content, and Format of Menus
- Phrasing the Menu
- Icons and Images
- Graphics and Multimedia

MODULE LEARNING ACTIVITIES	GRADE D	OUT-OF- CLASS TIME
<b>Reading:</b> Galitz, W. O., Part 2: Step 4, pp. 308–337 and Step 11, pp. 657–678	No	6 hr
<b>Reading:</b> ITT Tech Virtual Library> Basic Search> <ul style="list-style-type: none"> <li>• <i>Handbook of Human Factors in Web Design</i>&gt; Chapter 7, pp. 127–147</li> <li>• <i>Forms That Work: Designing Web Forms for Usability</i>&gt; Introduction, pp. 2–8 and Part 2: Chapter 6, pp. 102–116</li> </ul>	No	5 hr
<b>Lesson:</b> Study the lesson for this module.	No	2.5 hr
<b>Quiz:</b> Prepare for Quiz 2.	No	2 hr
<b>Discussion:</b> Participate in the discussion titled “What Interaction Style to Use?”	Yes	N/A
<b>Lab:</b> Complete the lab titled “Creating a Web Form.”	Yes	N/A
<b>Quiz:</b> Take Quiz 2.	Yes	N/A
<b>Project:</b> Continue work on Project Part 2.	No	1 hr

Total Out-Of-Class Activities: 16.5 Hours

## MODULE 5: ENHANCING EXISTING WEB DESIGNS

### COURSE LEARNING OBJECTIVES COVERED

- Refine a Web site for usability by performing the user interface design process and interface development.

### TOPICS COVERED

- Color Uses
- Problems with Colors
- Colors for Textual Graphic Screens
- Colors for Statistical Graphic Screen
- Colors for Web Pages
- Organize and Lay Out Screens
- Web Page Guidelines

MODULE LEARNING ACTIVITIES	GRADE D	OUT-OF- CLASS TIME
<b>Reading:</b> Galitz, W. O., Part 2: Step 12, pp. 692–701 and pp. 714–725 and Step 13, pp. 728–730 and pp. 750–760	No	4 hr
<b>Reading:</b> ITT Tech Virtual Library> Basic Search> Browse> Browse by Format> Books> Books24x7> <i>Web Design For Dummies</i> (3rd ed.)> Chapter 9	No	2 hr
<b>Lesson:</b> Study the lesson for this module.	No	2 hr
<b>Discussion:</b> Participate in the discussion titled “Improving Web Site Design.”	Yes	N/A
<b>Lab:</b> Complete the lab titled “Recreating Homepage of a Web Site.”	Yes	N/A
<b>Analysis:</b> Submit the analysis titled “Assessing Web Site Background.”	Yes	3.5 hr
<b>Project:</b> Continue work on Project Part 2.	No	3 hr

Total Out-Of-Class Activities: 14.5 Hours

## MODULE 6: MOBILE WEB DESIGNS AND SITE USABILITY

### COURSE LEARNING OBJECTIVES COVERED

- Apply design principles to create effective graphical and Web user interface.
- Identify the user and client requirements to create good interface and screen design.
- Design and organize graphical screens and Web pages to encourage fast and most accurate execution of features.
- Execute an approved design study in the intended Web format.
- Refine a Web site for usability by performing the user interface design process and interface development.
- Prepare a usability test plan for a given Web site.

### TOPICS COVERED

- Purpose of Usability Testing
- Importance of Usability Testing
- Scope of Testing
- Test Plan
- Test Conduct and Data Collection
- Analyze, Modify, and Retest
- Evaluate the Working System

MODULE LEARNING ACTIVITIES	GRADE D	OUT-OF- CLASS TIME
<b>Reading:</b> Galitz, W. O., Part 2: Step 14, pp. 767–771 and pp. 795–807	No	2 hr
<b>Lesson:</b> Study the lesson for this module.	No	1.5 hr
<b>Analysis:</b> Submit the analysis titled “Web Site for Mobiles.”	Yes	3 hr
<b>Project:</b> Submit Project Part 2.	Yes	2 hr

Total Out-Of-Class Activities: 8.5 Hours



## EVALUATION AND GRADING

### EVALUATION CRITERIA

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

Category	Weight
Discussion	15%
Lab	30%
Analysis	15%
Quiz	10%
Project	30%
TOTAL	100%

### GRADE CONVERSION

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

Grade	Percentage
A (4.0) )	90–100%
B+ (3.5) )	85–89%
B (3.0) )	80–84%
C+ (2.5) )	75–79%
C (2.0) )	70–74%
D+ (1.5) )	65–69%
D (1.0) )	60–64%
F (0.0)	<60%

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## LEARNING MATERIALS AND REFERENCES

### REQUIRED RESOURCES

#### COMPLETE TEXTBOOK PACKAGE

Galitz, W. (2007). *The essential guide to user interface design: An introduction to GUI design principles and techniques* (3rd ed.). Hoboken, NJ: John Wiley & Sons.

#### OTHER ITEMS

- Adobe Dreamweaver CS6

### RECOMMENDED RESOURCES

- Professional Associations
  - The World Wide Web Consortium (W3C)  
<http://www.w3.org/>
  - The User Experience Professionals Association (UXPA)  
<https://uxpa.org/>
- ITT Tech Virtual Library (accessed via Student Portal | <https://studentportal.itt-tech.edu>)
  - ITT Tech Virtual Library> Basic Search>
    - Jarrett, C., & Gaffney, G. (2009). *Forms that work: Designing web forms for usability*. Amsterdam: Elsevier/Morgan Kaufmann.
    - Proctor, R. W., & Vu, K. L. (2011). *Handbook of human factors in web design*. Boca Raton, FL: CRC Press.
- Other References
  - Adobe Dreamweaver Help and Tutorials  
(<https://helpx.adobe.com/dreamweaver/topics.html>)
  - Bram, T. (2013). Plain and simple. *Entrepreneur*, 41(10), 22.
  - Reinecke, K., & Bernstein, A. (2013). Knowing what a user likes: a design science approach to interfaces that automatically adapt to culture. *MIS quarterly*, 37(2), 427-A11.

## 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, critical thinking, and hands-on labs. Your progress will be regularly assessed through a variety of assessment tools including labs, discussions, analyses, quizzes, and project.

## 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)*