

Course Number IST 144

Course Title
Website Development

Credits 4

Hours: Lecture/Lab/Other Co- or Pre-requisite

Implementation Semester & Year

None 3 lecture / 2 lab

Spring 2022

### Catalog description:

Introduces website development skills. Thorough examination of Hypertext Markup Language (HTML) includes navigations, tables, Cascading Style Sheets (CSS), images, audios, videos, and forms. Students learn the latest Web design and development technologies including HTML5, CSS3, JavaScript, and jQuery.

**General Education Category:** 

**Course coordinator:** 

Not GenEd

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## **Required texts & Other materials:**

Required Textbook: Felke-Morris, Web Development and Design Foundations with HTML5, 10th

Edition. Pearson, ISBN-13: 9780137501311

Other online materials:

https://www.w3schools.com/html/

https://www.codecademy.com/learn/learn-html

https://code.visualstudio.com/docs/languages/html

https://www.codecademy.com/articles/visual-studio-code

https://www.w3schools.com/JS/

## **Course Student Learning Outcomes (SLO):**

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

- 1. Design website UI using HTML and CSS programming technology. [Supports ILG # 4; PLO #1, 2]
- 2. Develop software solutions using programming skills including user input, variables, control structures, functions, lists. [Supports ILG # 4, 11; PLO #1, 2]
- 3. Build website using HTML and JavaScript. [Supports ILG # 4, 11; PLO #1, 2]

### **Course-specific Institutional Learning Goals (ILG):**

**Institutional Learning Goal 4. Technology.** Students will use computer systems or other appropriate forms of technology to achieve educational and personal goals.

**Institutional Learning Goal 11. Critical Thinking:** Students will use critical thinking skills understand, analyze, or apply information or solve problems.

## Program Learning Outcomes for Mobile and Web Computing Certificate (PLO)

- 1. Analyze computer application requirements;
- 2. Design, write, test, and debug mobile and web applications.

## <u>Units of study in detail – Unit Student Learning Outcomes:</u>

## <u>Unit I</u> Hypertext Markup Language (HTML) Basics [Supports Course SLO #1] Learning Objectives

### The student will be able to:

- Create a web page using the html, head, body, title and meta elements.
- Configure the body of a web page with heading, paragraphs, line breaks, divs, lists, hyperlinks.
- Configure a web page with HTML5 structural elements: header, nav, main, footer, section, and article.

## <u>Unit II</u> Cascading Style Sheets (CSS) Basics [Supports Course SLO #1] Learning Objectives

#### Tearring Objectives

### The student will be able to:

- Configure background and text color on web pages.
- Create style sheets that configure common color and text properties.
- Use embedded style sheets and external style sheets.
- Create a table with HTML elements and style an HTML table with CSS.

### **Unit III** Forms [Supports Course SLO #1]

#### Learning Objectives

#### The student will be able to:

- Create forms using form elements and form controls.
- Style a form with CSS.
- Describe server-side processing.

### Unit IV Graphics and Media [Supports Course SLO #1]

#### Learning Objectives

## The student will be able to:

- Apply the image element to add graphs to web pages.
- Configure a graphic display with CSS.
- Create a web site with video and audio elements.

## <u>Unit V</u> Responsive Web Design [Supports Course SLO #1]

## Learning Objectives

### The student will be able to:

- Explain the concept of responsive web design.
- Design web pages with responsive layouts.

## **Unit VI JavaScript and jQuery** [Supports Course SLO #2, 3]

### Learning Objectives

The student will be able to ...

- Define and use variables, functions, control structures, arrays.
- Use JavaScript in web pages.
- Use jQuery JavaScript library.

# **Evaluation of student learning:**

Specific methods for evaluating student progress through the course is up to the discretion of the instructor. Below is an example:

Projects/Assignments = 50% of the grade Midterm = 20% of the grade Final Exam = 30% of the grade