

AUSTIN COMMUNITY COLLEGE CONTINUING EDUCATION
Interaction Design with CSS and JavaScript (12 hours)
ITNX 3019
COURSE SYLLABUS

Course Description: Learn to build interactive web elements using CSS transitions and JavaScript. This class provides hands-on experience triggering, timing, and animating the user interface. You'll learn the basics of CSS transitions and common jQuery functions to build standards-based interactive web interfaces.

PREREQUISITE: Web Authoring: Using CSS, or equivalent experience.

Objectives: At the completion of the course each student should be able to:

- code CSS animations
- trigger interactions using jQuery
- create sequenced, event-based animations

Rationale: The modern web has moved away from plug-in based interactivity. Web Developers must know how to create interactive UI elements with standards-based solutions (CSS and JavaScript).

Type of Course: Short Course

Evaluation: Students will be evaluated on their competency in performing a variety of hands-on exercises created to ensure the student has achieved all course objectives throughout the course, and class participation. In order to grant CEU credit for a course the students must be able to create functional user interface elements covered in class. The instructor will validate each participant's achievement of the course objectives by signing and awarding individual certificates of completion.

Course Outline:

- I. Introduction to CSS animation (4 hours)
 - A. Review of CSS3
 - B. CSS Transformations
 - C. Keyframe animation
 - D. Easing functions
 - E. CSS event triggers

- II. JavaScript animation (4 hours)
 - A. Introduction to jQuery
 - B. Event triggers
 - C. Callback functions
 - D. Chaining animations
 - E. Manipulating the DOM

- III. Practical examples (4 hours)
 - A. CSS Drop-down menus
 - B. Lightbox effect
 - C. Drag-and-drop with jQueryUI
 - D. Parallax scrolling effect

Student Assessment Checklist:

At the completion of the course each student should be able to:

- code CSS animations
- trigger interactions using jQuery
- create sequenced, event-based animations