**Course Title: Cascading Style Sheets (CSS) Course Syllabus**

**Course Description:** This course provides an in-depth understanding of CSS for styling web pages. Students will learn how to apply CSS properties to HTML elements to control layout, typography, colors, and other visual aspects of a website. The course covers CSS syntax, selectors, specificity, responsive design, and best practices in modern web development.

**Prerequisites:** Basic knowledge of HTML. Familiarity with web development concepts is helpful but not required.

**Course Objectives:**

1. Understand the fundamental concepts of CSS for web styling.
2. Learn how to apply CSS rules and properties to HTML elements.
3. Develop skills in creating responsive layouts using CSS.
4. Gain proficiency in styling typography, colors, backgrounds, and borders.
5. Explore advanced CSS techniques such as animations, transitions, and flexbox/grid layouts.

**Course Outline:**

1. **Introduction to CSS**
   - History and evolution of CSS
   - Inline, internal, and external CSS
   - CSS syntax and rule structure
2. **CSS Selectors**
   - Type selectors, class selectors, ID selectors
   - Descendant selectors, child selectors, sibling selectors
   - Pseudo-classes and pseudo-elements
3. **CSS Box Model**
   - Understanding the box model
   - Margin, border, padding, and content areas
   - Box model properties and sizing units
4. **Styling Typography**
   - Font properties (font-family, font-size, font-weight, etc.)
   - Text properties (text-align, text-decoration, text-transform, etc.)
   - Web fonts and font stacks
5. **Colors, Backgrounds, and Borders**
   - Color properties (color, background-color)
   - Background properties (background-image, background-repeat, background-size)
   - Border properties (border-width, border-style, border-color)

6. **CSS Layout Techniques**
    - Positioning (static, relative, absolute, fixed)
    - Display property (block, inline, inline-block)
    - Floats and clearing floats
7. **Responsive Web Design with CSS**
    - Media queries for responsive design
    - Mobile-first vs. desktop-first approaches
    - Creating flexible layouts using percentage widths and max-width
8. **Flexbox Layout**
    - Introduction to Flexbox
    - Flex container and flex items
    - Flex properties for alignment and distribution
9. **CSS Grid Layout**
    - Introduction to CSS Grid
    - Grid container and grid items
    - Grid properties for defining grid tracks and areas
10. **Advanced CSS Techniques**
    - CSS animations and transitions
    - Transformations (scale, rotate, translate, skew)
    - CSS variables (custom properties)
11. **CSS Preprocessors (Optional)**
    - Overview of CSS preprocessors (Sass, Less, Stylus)
    - Variables, mixins, and nesting
    - Compiling preprocessors to CSS
12. **Best Practices and Optimization**
    - CSS organization and naming conventions (BEM, SMACSS)
    - Performance optimization techniques (minification, bundling)
    - Cross-browser compatibility considerations

**Assessment:**

- Weekly assignments to reinforce learning concepts.
- Midterm project: Styling a static web page using CSS.
- Final project: Designing and implementing a responsive website layout using advanced CSS techniques.

**Textbook:** "CSS: The Definitive Guide" by Eric A. Meyer and Estelle Weyl

**Additional Resources:**

- Online tutorials and documentation (MDN Web Docs, CSS-Tricks).
- Supplemental readings and materials provided by the instructor.

**Grading:**

- Assignments: 30%
- Midterm Project: 20%
- Final Project: 40%
- Participation and Attendance: 10%

**Attendance Policy:** Regular attendance is expected. Students are allowed a maximum of three unexcused absences. Excessive absences may result in a reduction of the final grade.

**Office Hours:** Instructor office hours will be held twice a week for additional help and clarification.