Uka Tarsadia University

BCA

Introduction to Web Design (030010108)

1st Semester

EFFECTIVE FROM JUNE-2014

Course Code: 030010108   Course Title: Introduction to Web Design
Course Credits: 4   Total Hours: 48   [Lectures: 04, Tutorial: 00, Practical: 04]
Prerequisites: Nil
Prerequisites By Topics: Nil

Objectives: To provide basic understanding of web and HTML for designing web pages in conjunction with HTML tags, text, videos and CSS and event handling using JavaScript.

1 The Web   [06 Hours]

1.1. Introduction
1.2. Web Browser, Web Server
1.3. Internet
1.4. Planning Website : Types of Sites, Lifespan of Site, Practice Good Design
1.5. Web Hosting: the URL
1.6. Domain Names and IP Address
1.7. Transferring Files : FTP, Browser-Based Uploading

2 HTML and Cascading Style Sheets   [08 Hours]

2.1. Introduction: HTML
2.2. HTML Document: Basic Skelton, Adding Contents, Structuring Text, HTML Elements and Nesting Elements
2.3. HTML Elements: Paragraph, Line Breaks, Heading, Horizontal Lines, Preformatted Text
2.4. Introduction to CSS
2.5. Syntax and Structure of CSS
2.6. Class and ID Selectors, Pseudo Selector, Measurement Units
2.7. External Style Sheets, Embedded Style Sheets and Inline Style Sheets

3 HTML Formatting, Listing, Linking and Table Elements   [10 Hours]

3.1. HTML Formatting Elements: Look and Character Elements
3.2. Type of Listing and Listing Elements, Nested Listing
3.3. Web Typography: CSS Font properties, CSS Text spacing properties, Customizing Bulleted and Numbered Lists
3.4. HTML Linking Elements: Internal and External Links, Relative Links, Mailto Link
3.5. Website navigation using CSS
3.6. HTML Table Elements
3.7. Applying properties in HTML Table: Margin, Padding and Border

4 HTML Forms & Frames   [10 Hours]

4.1. Forms working
4.2. Form Element, Input Objects: text, password, checkbox, radio, submit, reset
4.3. Input Objects grouping and <SELECT>, <OPTION> AND <TEXTAREA> Elements
4.4. Styling Forms with CSS, Styling Forms within Tables
4.5. Frames
4.6. Frame Elements: <FRAMESET>, <FRAME>, <NOFRAMES> and <IFRAME>
4.7. Customizing Frame Characteristics

5 Adding Graphics and Page Layout   [08 Hours]

5.1. Images: The <IMG> Element, Alternate text, Picture Size, File Format for Graphics, Putting Pictures on Colored Background
5.2. Images and Styles: Inline Images in Text, Borders, Wrapping Text Around an Images, Adding Captions, Background Images
5.3. Image Links and Image Map
5.4. Style based Layout: Structuring pages with <div> element, Floating Boxes, Fixed Boxes

6 Java Script   [06 Hours]

6.1. Java Script : Introduction, Server-side and Client-side programming, Scripting Language
6.2. <SCRIPT> Element
6.3. Variables and Data Types
6.4. Functions
6.5. Dialog Boxes: Alert, Confirm and Prompt boxes

Course Outcomes:

CO1: Determine usage and working of Web.
CO2: Express and understanding of basic HTML and CSS structures.
CO3: Design web pages using CSS.
CO4: Designing application forms and frames in web pages using CSS.
CO5: Design attractive web pages with graphics and layouts using CSS.
CO6: Employ JavaScript within HTML.

Course Objectives and Course Outcomes Mapping:

Understanding of Web	CO1
Understanding of HTML	CO2
Designing web pages	CO3, CO4, CO5
HTML tags, text, videos and CSS	CO2, CO3, CO4, CO5
Event handling using JavaScript	CO6

Course Units and Course Outcomes Mapping:

Unit No.	Unit	Course Outcome					
		CO1	CO2	CO3	CO4	CO5	CO6
1	The Web	✓					
2	HTML and Cascading Style Sheets		✓				
3	HTML Formatting, Listing, Linking and Table Elements			✓		✓	
4	HTML Forms & Frames			✓	✓	✓	
5	Adding Graphics and Page Layout			✓		✓	
6	Java Script				✓		✓

Laboratory:

❖ The practical list shall not be repeated for next two consecutive years.
❖ Laboratory supervisor or course teacher shall sign in the journal only if he/ she feel satisfied by the work of student.
❖ Journal shall be verified twice during the 4th week of semester by course teacher.
❖ Journal must not be certified if required number of problems are not included and not written clearly or copied.
❖ After the approval of the Course Coordinator, the List of problem definition shall be kept by concern teacher on web site before the commencement of the semester.
❖ Problem list shall contain practical problems from 5 units are as follow:

Unit No.	Minimum No. of problem	Required No. of problem to get journal certified	Remarks
2	2	2	Covering all sub-topics from : 2.2
3	1	1	Covering all sub- topics from unit 3.
4	2	2	Covering all sub- topics from unit 4.
5	1	1	Covering all sub- topics from unit 5.
6	2	2	Covering all sub- topics from unit 6.

Computing Environment:

A student must have the following computing environment in laboratory and or on his/her laptop and.

❖ Any updated version Web Browser
❖ Notepad/gedit editor

Modes of Transaction (Delivery):

- ❖ Lecture/Discussion method: Give brief introduction and explanation of each subtopic by discussion.
- ❖ Demonstration: Show the practically implementation of each unit (except unit 1) topic.
- ❖ Hands on Training: Give practical work to implement topics in each unit (except unit 1).

Activities/Practicum:

The following activities shall be carried out by the students.
- ❖ Group of 8 students shall solve question bank after completion of each unit.
- ❖ As and when instructed by teacher, student shall perform hands-on activity in class room in their personal laptop.

The following activities shall be carried out by the teacher.
- ❖ Demonstration of HTML tags with CSS properties.
- ❖ Demonstration of event handling using JavaScript.
- ❖ Form a group of 8 students to solve question bank completion of each unit.

Text Book:

1. Matthew MacDonald - Creating a Website : The missing manual SPD – O'Reilly
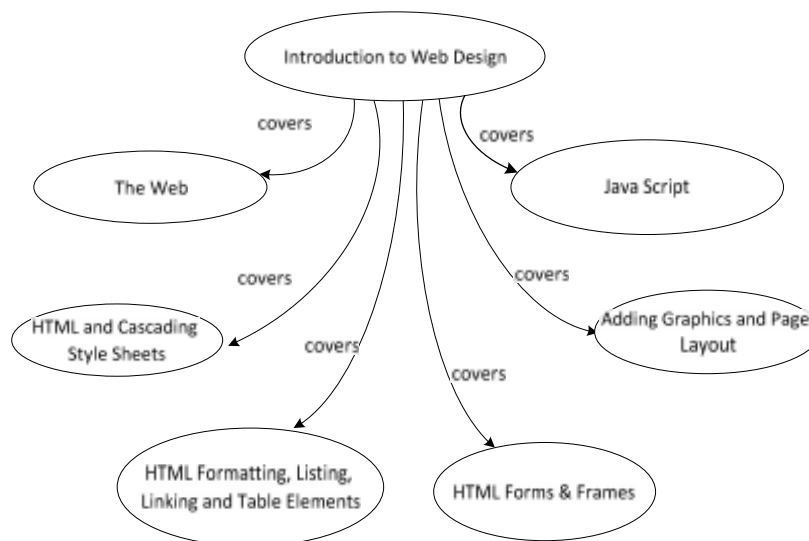
Reference Books:

1. Joel Sklar, Web Design Principles, CENGAGE Learning
2. Joel Sklar, Textbook of Web Design, CENGAGE Learning
3. Bayross - Web Enabled Commercial Application Development - BPB Publication.
4. Patel and Barik - Introduction to Internet & Web Designing - Acme Learning.
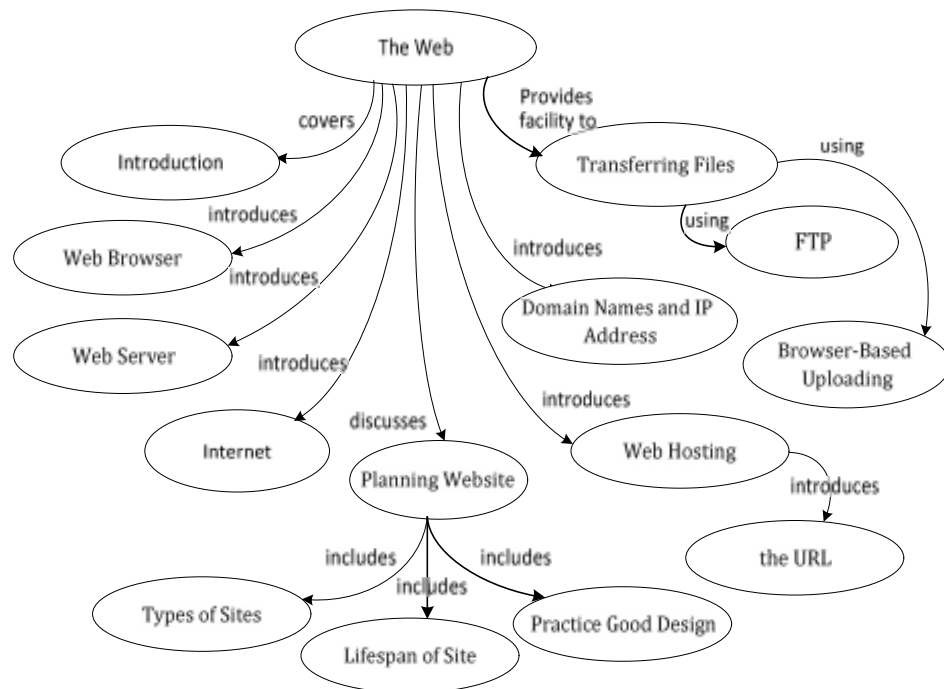5. Goplan N. P., Akilandeswari J. – Web Technology : A Developer's perspective – PHI

Concept Map:

It is a hierarchical / tree based representation of all topics covered under the course. This gives direct / indirect relationship /association among topics as well as subtopics.
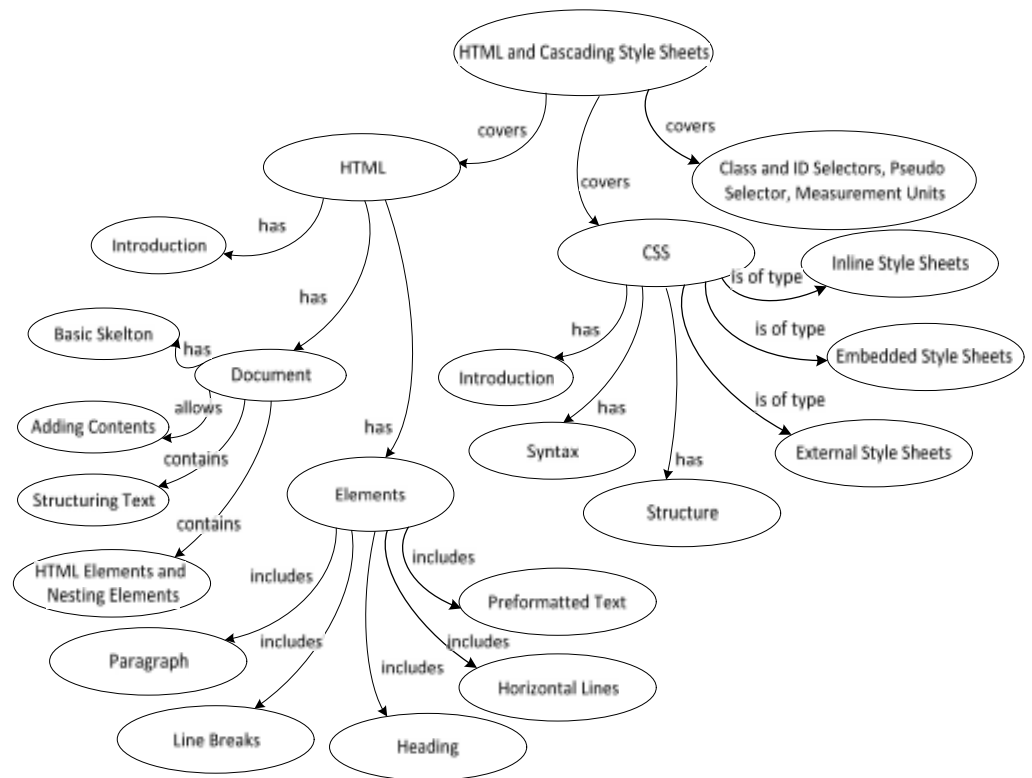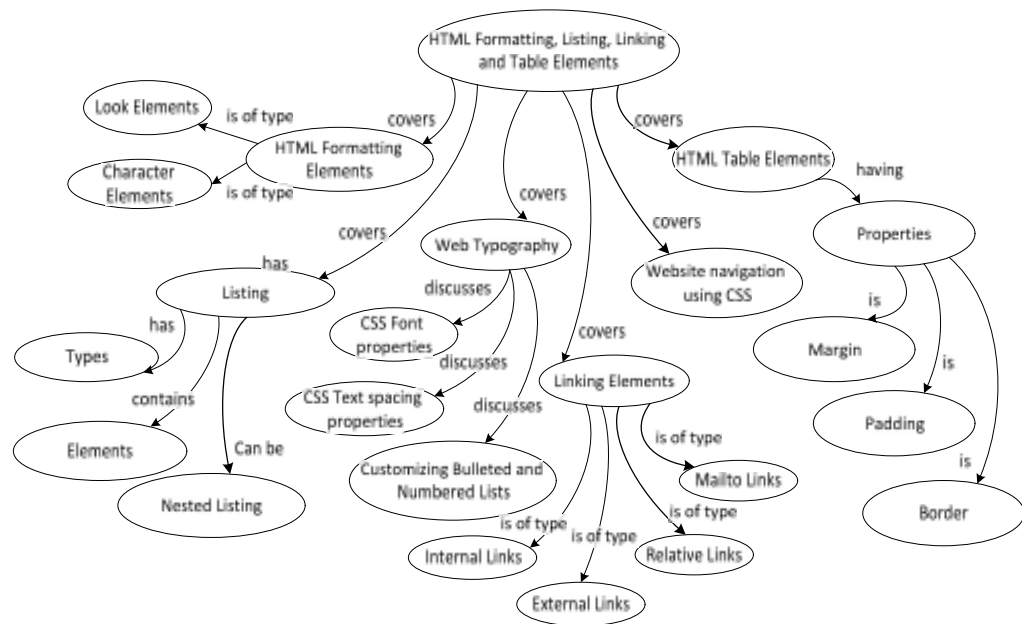
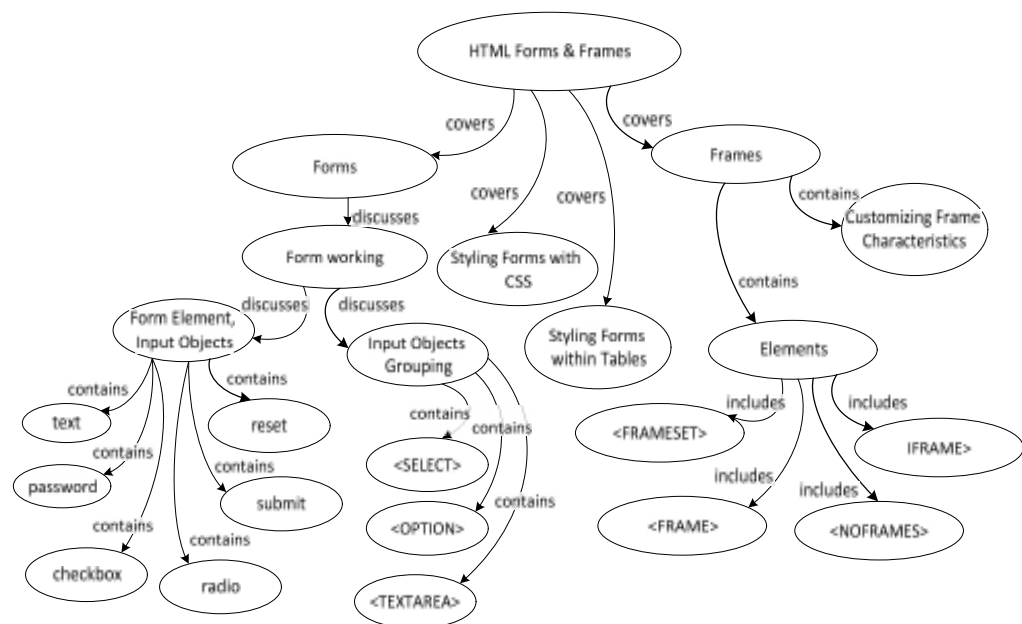Introduction to Web Design

Unit-1: The Web

The Web

covers → Introduction
Provides facility to → Transferring Files
Transferring Files — using → FTP
Transferring Files — using → Browser-Based Uploading
introduces → Web Browser
introduces → Web Server
introduces → Internet
introduces → Domain Names and IP Address
introduces → Web Hosting
Web Hosting — introduces → the URL
discusses → Planning Website
Planning Website — includes → Types of Sites
Planning Website — includes → Lifespan of Site
Planning Website — includes → Practice Good Design

Unit-2: HTML and Cascading Style Sheets

HTML and Cascading Style Sheets

covers → HTML
covers → CSS
covers → Class and ID Selectors, Pseudo Selector, Measurement Units

HTML — has → Introduction
HTML — has → Document
Document — has → Basic Skelton
Document — allows → Adding Contents
Adding Contents — contains → Structuring Text
Structuring Text — contains → HTML Elements and Nesting Elements
HTML — has → Elements
Elements — includes → Paragraph
Elements — includes → Line Breaks
Elements — includes → Heading
Elements — includes → Horizontal Lines
Elements — includes → Preformatted Text

CSS — has → Introduction
CSS — has → Syntax
CSS — has → Structure
CSS — is of type → Inline Style Sheets
CSS — is of type → Embedded Style Sheets
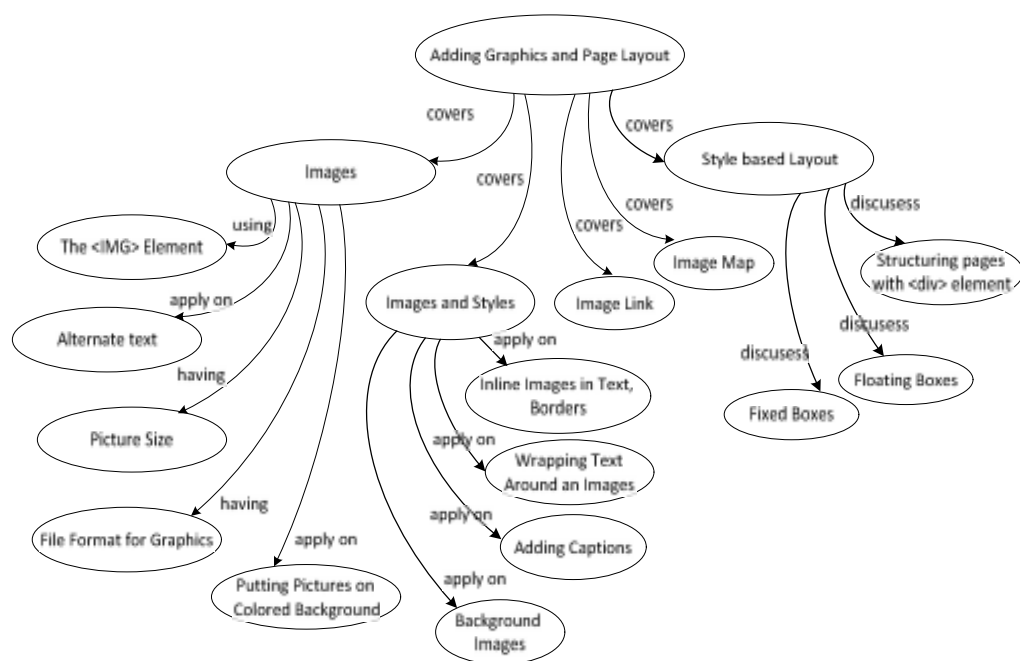CSS — is of type → External Style Sheets

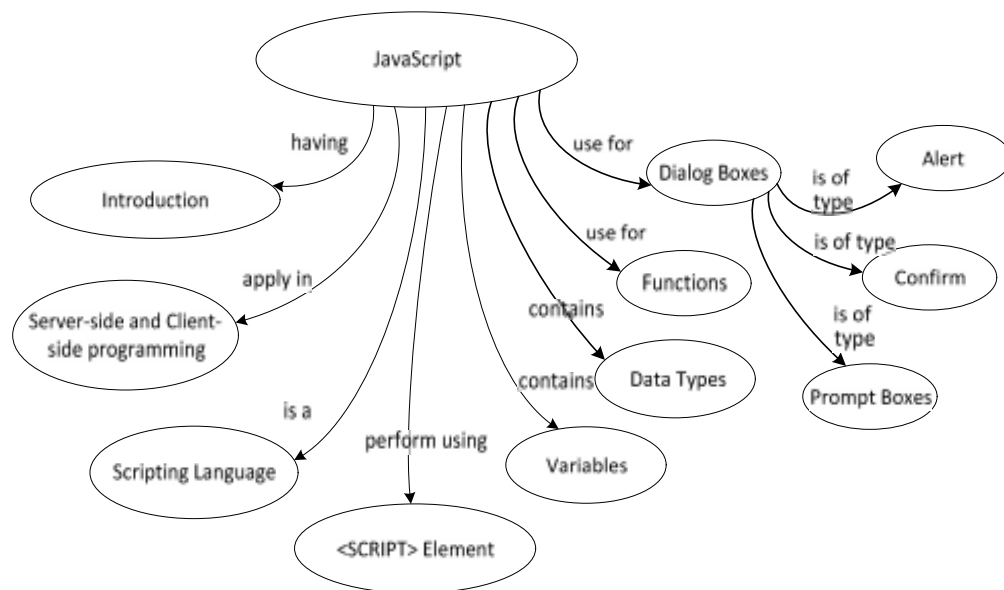Unit-3: HTML Formatting, Listing, Linking and Table Elements

Unit-4: HTML Forms & Frames

Unit-5: Adding Graphics and Page Layout

Unit-6: JavaScript

Assessment:

The weightage of CIE and University examination shall be as per the University regulations.
Composition of CIE shall be

Assessment Code	Assessment Type	Duration of each	Occurrence	Each of marks	Weightage in CIE of 40 marks	Remarks
A1	Quiz	45 Minutes	2 (including 1 online)	20	4 x 2= 8	Quiz 1 : Based on Unit 1 Quiz 2 : Based on Unit 4
A2	Unit Test	1.5 Hours	2	30	6 x 2 = 12	Test 1 : After completion of Unit 1 & 2 Test 2 : Based on Unit 4 & 5
A3	Assignment	20	1	50	5 X 1 = 5	Assignment 1: From All

		Days				Units
	OR Design at least 5 web Pages					
A4	Internal Exam	3 Hours	1	60	15 x 1 = 15	As per Schedule by Examination Committee
A5	Practical Quiz	1 Hour	1	20	4 x 1 = 4	P Quiz : Based On Unit 3 & 4
A6	Practical Internal Exam	2 Hours	2	30	6 x 2 =12	P Internal 1: After completion of Unit 1,2, & 3 P Internal 2: As per Schedule by Examination Committee

❖ This is subject to implementation of bonus and penalty as per course teacher.

Course Assessment with Course Outcomes Mapping

Assessment	Course Outcomes					
	CO1	CO2	CO3	CO4	CO5	CO6
A1	✓			✓	✓	
A2	✓	✓			✓	✓
A3	✓	✓	✓	✓	✓	✓
A4	✓	✓	✓	✓	✓	✓
A5			✓	✓	✓	
A6		✓	✓	✓	✓	✓

Question Bank:

Question Bank must be prepared which consists of several types of questions namely Multiple Choice Questions, Fill in the blanks, Short type questions, Long type questions, website design definition and practical list.

Academic Honesty:

Coursework is assumed to be accomplished individually (otherwise stated). Any portion of submission taken directly from anywhere (like statements in assignment/report etc.) without modification must be accompanied with the properly formatted reference giving credit to the author and to the source.

UFM:

❖ If two or more submitted papers are too similar for coincidence, a penalty shall be imposed that shall usually be the same for the student who did the original as for the one copying from it.
❖ Any ascertained fact of breaking institute policy shall be associated with one or all of the following: (i) zero marks for the work; (ii) report to the Course coordinator; (iii) report to the Director.

Discussion Group:

Students are welcome to post on the Course Discussion Board available on SRIMCA View Course Webpage. It is responsibility of the concern Course teacher to maintain Discussion Board.

Attendance:

❖ Attendance means being present for the entire class session. Those arriving significant late or leaving significantly early without prior permission shall be counted as ABSENT for the entire class session.
❖ Concern teacher must clearly state his/her attendance policies at the first class meeting.