

Branch Name:	Computer Engineering / Information Technology
Program Code:	ET404 / ET407
Course Title:	Web Development Tools
Course Code:	2ET4040406
Pre-requisite Course:	

Course Objectives:

1. Understand the principles of creating an effective webpage, including an in- depth consideration of information architecture.
2. Become familiar with graphic design principles that relate to web design and learn how to implement theories into practice.
3. Develop skills in analyzing the usability of a website.
4. Understand how to plan and conduct user research related to web usability.
5. Create interactive website using various tools (e.g. WordPress)

Teaching and Examination Scheme:

Teaching Scheme (Hours per week)				Evaluation Scheme (Marks)				
Lecture (L)	Tutorial (T)	Practical (P)	Credit	Theory (Marks)		Practical (Marks)		Total (Marks)
				University Assessment	Continuous Assessment	University Assessment	Continuous Assessment	
-	-	4	2	-	-	40	60	100

Course Contents:

Unit No	Topic	Total Hours	Weightage (%)
1.	Web Terminologies 1.1 Web Terminologies: web, web page, http, domain name, register and host a domain name, ISP 1.2 XML Technology: XML TREE, XML DTD 1.3 Installing and Setting Up WAMP/XAMPP Server on Computer 1.4 IIS Configuration 1.5 Web services: definition, importance, examples.	10	18
2.	Introduction to Google apps 2.1 Creating mail account 2.2 Gmail compose and reply: streamlined compose pane, check your mail while typing, formatting options appear only when you need them, new keyboard shortcuts, drag and drop addresses, drag and drop files, compose two messages at once, draft, create signatures, labels, filters, contacts (create groups and mailing lists, import contacts, contacts picker 2.3 Chat 2.4 Calendar (scheduling and other calendar basics, set up reminders, sharing and more) 2.5 Working with Documents: Word, Excel, creating form. 2.6 Drive (Set up Google drive, (Organize, find, share files), open and preview files) 2.7 Working with Groups.	14	24
3.	Working with WordPress 3.1 Introduction to WordPress: make a website or a blog using a WordPress, Downloading and Installing WordPress on XAMPP SERVER 3.2 All menus on the Administration Screen 3.3 Dashboard: website management functions of WordPress 3.4 Themes: Installing and handling themes, Editing the appearance of themes, theme configurations, adjusting different elements of installed themes like slideshow, post, pages 3.5 Posts: Adding new post, modifying existing posts, placing images, videos to	16	29

	the posts, adding categories to publishing the posts on the websites 3.6 Pages: Adding New webpages, modifying pages, editing pages, placing images, videos, mp3 to the pages, publishing the pages on the websites, creating static home pages. 3.7 Menus: Creating Custom Menus, modifying themes default menu		
4.	Working with WordPress 4.1 Media: Uploading pictures, videos, editing images, 2. publishing them on the websites, embedding videos from 3. YouTube to your website. 4.2 Links: Adding New links, Editing the links, Adding categories to the links, Managing Categories 4.3 Widget s: Adding, Editing widgets to the theme. 4.4 Plugins: Introduction to plugins, installing plugins, Editing plugins. 4.5 Social Media Plugins: Floating social networking, social media widget, social media tabs, social media mashup, social networking icons 4.6 Users: Managing the accessibility to the website/blog. 4.7 Slider: Adding Custom Slider to the themes.	16	29

Text Books:

Learning to Program with Alice, 3rd Edition Dann, Cooper and Pausch (Pearson Education)

Reference Books:

Sams Teach Yourself WordPress 3 in 10 Minutes Chuck Tomasi, Kreg Steppe (SAMS)
Web Technologies Uttam Kumar Roy, Debarshi Kumar Sanyal (Oxford University Press)

List of Open-Source Software/learning website:

1. <http://www.andrew.cmu.edu/user/dslater/screencasts/index.html> (Video tutorial for Alice)
2. <http://www.w3schools.com/>
3. http://www.alice.org/3.1/materials_videos (Video tutorial for Alice)
4. http://www.alice.org/3.1/materials_download (Lab exercises for Alice)
5. <http://learn.wordpress.com>
6. <http://learn.googleapps.com/training-videos>
7. <http://www.1stwebdesigner.com/wordpress/wordpress-step-by-step-beginners-guide/>
8. <http://www.free-ebooks.net/ebook/WordPress-for-Beginners-Easy-as-1-2-3/pdf?dl&preview>

Course Learning Outcomes (CLO):

The theory should be taught and practical should be carried out in such a manner that students are able to acquire different learning outcomes in cognitive, psychomotor and affective domain to demonstrate following course outcomes.

1. Illustrate the basics of WWW (World Wide Web) and different Web Browsers.
2. Use Gmail account and Google Apps.
3. Create a WordPress-based user interface and website
4. Create small scale animations

LIST OF PRACTICAL:

SR. No.	Experiment
1	Write various web terminologies.
2	Create one sample XML document using different XML technologies.
3	Create Gmail Account and contacts. Test various mail utilities such as write mail, Send mail, forward mail, reply mail, attach a file, creating signature, draft etc.
4	Test advanced feature of Gmail and Test calendar functionality.
5	Test Google docs. Test google drives.
6	Create group, sharing information, sending messages to a group etc.
7	Download and install WordPress on Xampp server.
8	Work with administration menu and Dashboard: Logging in and looking around.
9	Understand the different feature's themes and what a theme is. Installing themes. Pick a theme that works for what you want to create Switch your theme, if you change your mind. Make your theme beautiful on computers, phones, and tablets.
10	Add personal touches to your blog, like as a custom header or background. Access more options to personalize your blog, such as unique font sand colors.
11	Add and configure widgets (and what widgets are).
12	Create a post or a page. Publish a post with text and images. Use different post formats depending on what you want to publish. Publish a page with text and images.
13	Create a menu to help visitors navigate your pages and posts.
14	Install plugins and edit plugins.
15	Manage users to access your website Add custom slider.

Mapping of CLO with PO and PSO

Course Learning Outcomes	Program Outcomes (POs)												Program Specific Outcomes (PSOs)			
	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10	PO11	PO12	PSO1	PSO2	PSO3	PSO4
CLO1	H		M										L	M		
CLO2	H		M										M	L		
CLO3	H		H										H	L		
CLO4																
CLO5																
CLO6																

H: High, M: Medium, L: Low