

Teaching Plan (2019-2020)

Semester -V

Name of the Course: Web Technology

Subject Code: SC1751

No. of Hours per Week	Credit	Total No. of Hours	Marks
6	5	90	100

Objectives:

1. To enable the students to understand the basic concepts and architecture involved in web technology, scripting languages and mark-up languages.
2. To implement the professional ethics to design web pages.

CO	Upon completion of this course the students will be able to :	PSO addressed	CL
CO -1	develop an ability to design and implement static and dynamic web pages.	PSO – 4	C
CO -2	differentiate web applications using client-side (JavaScript, HTML, XML) and server-side technologies (ASP.NET, ADO.NET).	PSO –7	AP
CO -3	define the fundamental ideas and standards underlying Web Service Technology	PSO – 1	U
CO -4	apply the knowledge of the internet and related internet concepts that are vital in understanding web application development and analyze the insights of internet programming to implement complete application over the web.	PSO –11	AP

Unit	Module	Topics	Lecture hours	Learning Outcome	Pedagogy	Assessment/ Evaluation
I	Introduction to Web Technologies and HTML					
	1.	History of the Web, Understanding Web System Architecture, Understanding 3-tier Web Architecture	2	To recall the history of web, 3-tier web architecture	Lecture with PPT	Evaluation through: short test Multiple choice questions
	2.	Web Browsers, Introducing HTML Document Structure, Creating Heading on a Webpage	3	To recall the different types of browsers, structure of HTML document. To be able to create heading on a web page	Lecture with PPT	Formative Assessment
	3.	Working with Links, Creating a Paragraph, Working with Images	3	To be able to create link, paragraph and images in web page	Illustration by examples	
	4.	Working with Tables	2	To be able to create tables in web page.	Lecture, Illustration by examples	
	5.	Working with Frames	2	To be able to create frames in web page.	Lecture, Illustration by examples	
	6.	Introducing to Forms and HTML Controls	3	To be able to create HTML forms and add controls in it.	Lecture, Demonstration, Illustration by examples	
	7	Introducing Cascading Style Sheets	2	To be able to create cascading styles in a web page in	Lecture, Illustration by examples	

				4 ways.		
II	Introduction to JavaScript					
	1.	Introducing JavaScript, Handling Events	3	To be able to create application using JavaScript. To define the benefits of JavaScript. To handle events in JavaScript.	Lecture with PPT	Short test Quiz Formative Assessment
	2.	Using Variables in JavaScript, Using Array in JavaScript, Creating Objects in JavaScript	4	To be able to create objects in JavaScript. To use variables and array in JavaScript.	Lecture with PPT	
	3.	Using Operators	3	To recall the different types of operators in JavaScript.	Lecture, Group Discussion	
	4.	Working with Control Flow Statements, Working with Functions	4	To be able to create own function in the Script. To Analyze different types of control flow statements.	Lecture, Illustration by examples, Discussion	
III	Introducing PHP, Working with Variables, Controlling Program Flow and Working with Functions, Arrays, Files, Directories					
	1.	Version of PHP, Features of PHP, Creating a PHP Script, Running a	3	To define the versions, features in PHP. To be able to create,	Lecture, PPT,	Short test Formative Assessment

		PHP Script, Handling Errors in a PHP Script and Escape Characters		run and handle errors in PHP Script.		
	2.	Using Variables, Using Constants, Exploring data types in PHP and Exploring Operators in PHP	3	To use variables, constants, data types & operators in PHP.	Lecture, Group Discussion	
	3.	Conditional Statements, Looping Statements	4	To Analyze different types of control flow statements.	Lecture, PPT, Group Discussion	
	4.	User-defined Functions in PHP, Built in Functions in PHP, Introducing Arrays, Types of Arrays	3	To be able to create functions in PHP. To be able to create an array in PHP. To analyze the different types of arrays in PHP.	Lecture, PPT, Illustration by examples	
	5.	Working with Files, Working with Directories	3	To recall the functions that can be used to perform on a file and directories.	Lecture, PPT, Illustration by examples	
IV	Working with Forms and Database and Exploring Cookies, Session and PHP Security					
	1.	Introduction to Web Forms, Working with <form>tag and Form	2	To be able to create forms in Web and define the	Lecture with PPT	Short test

		Elements, Processing a Web Form		attributes of <form> tag.		Assignment Quiz
	2.	Validating a Form, Introducing Databases, Using PHP and MySql	3	To be able to validate a form. To establish connection with the Mysql database server in PHP.	Lecture with PPT, Illustration by examples	Formative Assessment
	3.	Working with Cookies, Working with Session	3	To define cookies and its attributes. To be able to define session.	Lecture with PPT	
	4.	Protecting Data, Configuring PHP Security	3	To define how to protect data from unauthorized users. To recall the various PHP configuration directives to configure PHP security.	Lecture with PPT	
V	Introducing to XML					
	1.	Definition of XML, XML Versus HTML, Electronic Data Interchange (EDI)	4	To define XML, difference between XML and HTML, EDI	Lecture with PPT, Discussion	Short test
	2.	XML Terminology	2	To recall the related terms about XML.	Lecture with PPT	Formative Assessment
	3.	Introduction to DTD,	4	To define	Lecture	

	Document Type Declaration, Elements Type Declaration		DTD, different types of DTD.	with PPT, Group Discussion
4.	Attribute Declaration and Limitation of DTD, Introduction to Schema	3	To be able to declare attributes in XML. To be able to define limitations of DTD, Schema.	Lecture, Discussion
5.	Complex Types, Extensible Style Sheet Language Transformations	4	To define extensible style sheet language transformations.	

Course Instructor: J. Anto Hepzie Bai

HOD: Sr. Jothi Antony

Name of the Course: Operating Systems

Subject Code: SC1752

No. of Hours per Week	Credit	Total No. of Hours	Marks
5	5	75	100

Objectives:

1. To focus on the different operating systems and the back processing involved in it.
2. To inculcate the knowledge of working process of various operating systems.

CO	Upon completion of this course the students will be able to :	PSO addressed	CL
CO -1	analyze the structure of OS and basic architectural components involved in OS design	PSO – 12	AN
CO -2	analyze the applications to run in parallel either using process or thread models of different OS	PSO – 6	AN
CO -3	describe the various device and resource management techniques for timesharing and distributed systems	PSO - 9	U

				states of operating system process	Discussion	Assessment
	3.	Process Description	2	To elaborate the OS processor	Lecture with PPT Illustration	
	4.	Process Control	2	To learn about input output process control	Lecture , PPT	
	5.	Processes and Threads	2	To be able to identify the threads in process	Lecture	
	6.	Principles of Concurrency, Semaphores	3	To find out the principles of OS	Lecture, Discussion	
	7.	Principles of Deadlock	2	To be able to debug the errors in Operating System	Lecture, Discussion	
	8.	Deadlock Prevention, Deadlock Avoidance, Deadlock Detection.	3	To learn how to prevent and detect the problem in OS		
III	Memory Management, Virtual Memory					
	1.	Memory Management Requirements	2	To be able to manage all the requirements in the memory	Lecture with PPT Illustration	Short test Formative Assessment Multiple choice questions, Quiz, Assignments through MOODLE
	2.	Memory Partitioning	2	To be able to identify the different types of memory	Lecture, Illustration	
	3.	Paging	2	To elaborate the paging method	Lecture, Illustration	

	4.	Segmentation	2	To separate all the operating system process	Lecture with PPT Illustration	
	5.	Operating System Software	2	To define the Operating System Software	Lecture with Illustration	
IV	Uniprocessor, Scheduling, Multiprocessor and Real Time Scheduling					
	1.	Types of Scheduling	2	To understand the types of scheduling	Lecture with Illustration	Short test Formative Assessment
	2.	Multiprocessor Scheduling	2	To be able to identify the scheduling in the multiprocessor	Lecture with PPT Illustration	
	4.	Real Time Scheduling	2	To understand the format for memory and scheduling	Lecture with PPT Illustration	
	5.	I/O Devices, Organization of the I/O Function	2	To distinguish the difference between I/O devices and I/O function	Lecture with PPT Illustration	
	6.	Operating System Design Issues, I/O Buffering, Disk Scheduling.	4	To be able to identify all issues	Lecture	
V	File Management, Computer Security Threats					
	1.	Overview , File	3	To	Lecture	Short test

		Organization and Access		understand file organization and access all the file	with PPT Illustration	Formative Assessment
	2.	File Directories , File Sharing , Record Blocking	3	To know the sharing process of all files	Lecture with Illustration	Quiz Short test
	3.	Secondary Storage Management	2	To get access from secondary storage memory	Lecture with PPT Illustration	
	4.	Computer Security Concepts	2	To secure all files with the help of computer security	Lecture with PPT Illustration	
	5.	Threats, Attacks, and Assets	3	To be able to know how to prevent our system from all types of attacks and threats	Lecture with PPT Illustration Videos	
	6.	Intruders , Viruses, Worms, and Bots	3	To be able to know how to prevent the system from virus	Lecture with PPT Illustration Videos	

Course Instructor: V. Abisha

HOD: Sr. Jothi Antony

Name of the Course : Data Communication and Computer Networks

Subject Code : SC1753

No. of Hours per Week	Credit	Total No. of Hours	Marks
5	5	75	100

Objectives:

1. To focus the students on the various technologies and terminologies used in transmitting data through computer networks.
2. To build the skill of networking technology for effective communication.

CO	Upon completion of this course the students will be able to :	PSO addressed	CL
CO -1	Independently understand basic computer network technology.	PSO – 1	U
CO -2	Understand and explain Data Communications System and its components.	PSO – 2	U
CO -3	Identify the different types of network topologies and protocols	PSO - 3	U
CO -4	Enumerate the layers of the OSI model and TCP/IP. Explain the function(s) of each layer.	PSO – 12	U
CO -5	Apply the different types of network devices and their functions within a network	PSO – 3	AP
CO -6	Familiarity with the basic protocols of computer networks, and how they can be used to assist in network design and implementation.	PSO –9	AP

Unit	Module	Topics	Lecture hours	Learning Outcome	Pedagogy	Assessment/ evaluation
I	Introduction: Data Communications					
	1.	Data Communications and Networks	2	To understand basic elements of data communication and networks	Lecture, Discussion	Multiple choice questions, Quiz Evaluation through: short test
	2.	Protocols and Standards	3	To understand the Protocols and Standards	Lecture , PPT	
	3.	Network Models: Layers in the OSI Model	2	To know about the basic	Lecture,	

				Network Models	Discussion	Formative Assessment
	4.	TCP/IP Protocol Suite.	2	To know about TCP/IP Protocol Suite.	Lecture, PPT Discussion	
	6.	Addressing	4	To understand addressing	Lecture with PPT Illustration,	
II	Multiplexing, Transmission Media Switching:					
	1.	Frequency-Division Multiplexing	2	To analyze Frequency-Division Multiplexing	Lecture, Discussion	Quiz Short test
	2.	Statistical Time-Division Multiplexing	2	To be understand Statistical Time-Division Multiplexing	Lecture, PPT Discussion	Formative Assessment, Assignments through MOODLE
	3.	Guided Media	2	To understand the Guided Media	Lecture with PPT Illustration	
	4.	Unguided Media: Wireless	2	To learn about Unguided Media	Lecture	
	5.	Circuit-Switched Networks – Datagram Networks	4	To understand about the switches and their different types	Lecture	
	6.	Datagram Networks	3	To understand Datagram Networks	Lecture, Discussion	
	7.	Structure of a Switch.	2	To be able to understand the Structure of a Switch.	Lecture, Discussion	
III	Using Telephone and Cable Networks for Data Transmission					
	1.	Dial-up Modems	2	To understand	Lecture with PPT	Short test

				the dial-up modems	Illustration	Formative Assessment Multiple choice questions, Quiz, Assignments through MOODLE
	2.	Cable TV Networks , Cable TV for Data Transfer	2	To be able to analyze about the Cable TV for Data Transfer	Lecture, Illustration	
	3.	Error Detection and correction: Introduction , Block Coding	2	To elaborate the Error Detection and correction method	Lecture, Illustration	
	4.	Data Link Control: Protocols, HDLC , Point-to-Point Protocol	4	To understand the Data Link Control Protocols,	Lecture with PPT Illustration	
	5.	Multiple Access: Channelization	2	To define the channelization	Lecture with Illustration	
IV	Wired LANs					
	1.	Ethernet: Fast Ethernet - Gigabit Ethernet	2	To understand the types of Ethernet	Lecture with Illustration	Short test Formative Assessment
	2.	Wireless LANs: Bluetooth.	2	To understand about Bluetooth	Lecture with PPT Illustration	
	4.	Connecting LANs, Backbone Networks, and Virtual LANs: Connecting Devices.	5	Connecting LANs, Backbone Networks, and Virtual LANs: Connecting Devices.	Lecture with PPT Illustration	
	5.	Wireless WANs: Cellular Telephone and Satellite Networks: Cellular Telephony - Satellite Network.	4	To learn about the Cellular Telephone and Satellite Networks	Lecture with PPT Illustration	
	6.	Network Layer: Logical	3	To understand		

		Addressing: IPv4 Addresses ,IPv6 Addresses		the Network Layer and Logical Addressing		
	7.	Network Layer: Address Mapping, Error Reporting, and Multicasting: Address Mapping.	3	To be able to identify Network Layer: Address Mapping, Error Reporting, and Multicasting: Address Mapping.	Lecture	
V	Process-to Process Delivery, Domain Name System, Cryptography:					
	1.	UDP, TCP, and SCTP: User Datagram Protocol (UDP) , TCP	2	To understand the UDP and TCP	Lecture with PPT Illustration	Short test Formative Assessment
	2.	Name Space ,Domain Name Space , DNS in the Internet.	2	To know about the DNS	Lecture with Illustration	Quiz
	3.	Remote Logging, Electronic Mail, and File Transfer: Remote Logging - Electronic Mail	2	To know about remote logging	Lecture with PPT Illustration	Short test
	4.	File Transfer Protocol (FTP	2	To know about FTP	Lecture with PPT Illustration	
	5.	Symmetric-Key Cryptography , Asymmetric Key Cryptography: RSA	3	To know about cryptography types	Lecture with PPT Illustration	
	6.	Network Security: Digital Signature	3	To be able to know how to secure our network	Lecture with PPT Illustration	

Course Instructor: P. Jasmine Lizy

HOD: Sr. Jothi Antony

Name of the Course : Photoshop (SBC)

Subject Code : SSK175

No. of Hours per Week	Credit	Total No. of Hours	Marks
2	2	30	100

Objectives:

1. To enable students to create images for web design, logos, graphics, layouts, image touch-ups and colour enhancement.
2. To develop the skills for manipulating the images creatively.

CO	Upon completion of this course the students will be able to :	PSO addressed	CL
1	Understand retouch and repair a scanned photograph.	1	AP
2	Create abilities to use Photoshop that are employable and rewarding.	3	C
3	Understand how to do basic photo repairs and color enhancements techniques.	1	AP
4	Define and apply the basic functions of pixel selection, painting and editing tools	5	R
5	Understand file compression, Import and export files and save files in different formats	3, 2	AN
6	Utilize retouching features to make pictures perfect	3	C

Unit	Module	Topics	Lecture hours	Learning Outcome	Pedagogy	Assessment / Evaluation
I	Starting Photoshop CS2					
	1.	Getting Started with Photoshop CS2, Opening an Existing File and The Photoshop Program Window	1	To understand the concept of Photoshop	Lecture	Short test
	2.	Guidelines for Working with Toolbox and Screen Modes	2	To be aware of the guidelines	Lecture with PPT	
	3.	Creating a New File , Saving Files , Removing Files and Closing File	1	To understand the necessary features	Illustration with PPT	Formative Assessment
					Quiz	
II	Working with Images					
	1.	Vector and Bitmap Images, Opening Recently used Files , Image Size , Image Resolution and Editing Images	1	To analyze the various features of images	Lecture	Multiple choice questions
	2.	Opening Files Created in Illustrator or Freehand and Color Modes	2	To learn more color modes	Lecture with PPT	Evaluation through: short test
	3.	Setting a Current Foreground and Background Colors and File Formats	2	To recall the various formats	Illustration with PPT	Formative Assessment
III	Making Selections					
	1.	Making Selection, The Grow and Similar Commands and Moving a Portion of an Image	1	To learn different resizing of the image	Lecture	Multiple choice questions
	2.	Editing Selections and Copying a Selection into another Image	1	To understand the features of selection	Lecture with PPT	
	3.	Filling a Selection.	1	To get the knowledge of filling	Illustration with PPT	Evaluation through: short test
	4.	Transforming Selections	2	To be able to operate the transformations	PPT	

IV	Painting, Drawing and Retouching Tools and Layers					
	1.	The painting Tools	2	To know the painting tools	Lecture	Multiple choice questions
	2.	The Drawing Tools	3	To work with the drawing tools	Lecture with PPT	
	3.	The Retouching Tools	2	To get to know the retouching tools	Illustration with PPT	Evaluation through: short test
4.	Layers Palette and Working with Layers	2	To be aware of the layers and palette	Illustration	Formative Assessment	
V	Filters					
	1.	The Filter Menu and Filter Gallery	1	To get to know the menu and gallery	Lecture	Multiple choice questions
	2.	Extract Filter and Liquefy Filter	2	To recognize different filters	Lecture with PPT	Evaluation through: short test
	3.	Vanishing Point Filter and Artistic Filters	2	To know more about filters	Illustration with PPT	Formative Assessment
4.	Blur Filters and Brush Stroke Filters	2	To distinguish the difference filters	Illustration		

Course Instructor: Sr. Jothi Antony

HOD: Sr. Jothi Antony