LESSON PLAN (SESSION 2024-25)
(ODD SEMESTER)

Dr. Pooja Singh
Asstt. Professor, Computer Science Deptt.

For BCA-1ST Semester
SUBJECT: Web Development-I
PAPER CODE: 24CSC401SE01

JULY & AUGUST

Introduction to Internet and World Wide Web: Evolution and History of World Wide Web; Basic features; the evolution of Web development;
Web Browsers: Web Servers; Hypertext Transfer Protocol; URLs; IP Addresses; Domain Names; Searching and Web- Casting Techniques; Search Engines and Search Tools;
Internet Security; The Web Programmers; Toolbox. Introduction to Web Technologies; Introduction to HTML, CSS, and JavaScript; Introduction to Client-Side vs. Server- Side Scripting;
Web Publishing: Hosting your Site; Internet Service Provider; Planning and designing your Web Site; Steps for developing your Site; Choosing the contents; Home Page; Domain Names;
Creating a Website and the Markup Languages (HTML, DHTML);

SEPTEMBER

Web Development: Introduction to HTML; Hypertext and HTML; HTML Document Features; HTML command Tags; Creating Links; Headers; Text styles; Text Structuring; Text colors and Background; Formatting text; Page layouts; Lists, Tables; meta element; New HTML5 Form input Types; input and data list elements; auto complete Attribute; Page-Structure Elements; Introduction to DHTML and its features;
Brief Introduction to Interactivity tools: CGI; Features of Java; Java Script; Features of ASP; VBScript; Macromedia Flash; Macromedia Dreamweaver;
JavaScript: The JavaScript execution environment; The Document Object Model ; Element access in JavaScript; Events and event handling ; Handling events from the Body elements, Button elements, Text box, and Password elements ; The DOM 2 event model ; The navigator object ; DOM tree traversal and modification;

OCTOBER

Introduction to CSS: Introduction to CSS, Block and Inline Elements, Inline Styles, using internal CSS, using external CSS, How CSS rules cascade, inheritance, why use external style sheets?
CSS3 Basics: CSS selectors, color: foreground color, background color, contrast, opacity; text: Typeface terminology, Specifying Typefaces, fonts; list tables and forms: list-style, table properties, styling forms, styling text input

NOVEMBER

Layout and positioning: layout: key concepts in positioning elements, controlling the position of elements: relative positioning, absolute positioning, fixed positioning, z-index, float, clear, creating multi column layout with float, fixed width layout, liquid layout, layout grids, Images: controlling size of images in CSS, aligning images using CSS, centering images using CSS, background images, gradients, Media Queries, Revision, Test.

LESSON PLAN (SESSION 2024-25)
(ODD SEMESTER)

Dr. Pooja Singh
Asstt. Professor, Computer Science Deptt.

For BCA 3RD Semester
SUBJECT: Introduction to Operating System
PAPER CODE: BCA-201

JULY &AUGUST

Fundamentals of Operating system: Introduction to Operating System, its need and operating System services, Early systems, Structures - Simple Batch, Multi programmed, timeshared, Personal Computer, Parallel, Distributed Systems, Real-Time Systems.
Process Management: Process concept, Operation on processes, Cooperating Processes, Threads, and Inter-process Communication.

SEPTEMBER

CPU Scheduling: Basic concepts, Scheduling criteria, Scheduling algorithms : FCFS, SJF, Round Robin & Queue Algorithms.
Deadlocks: Deadlock characterization, Methods for handling deadlocks, Banker'sAlgorithm.
Memory Management: Logical versus Physical address space, Swapping, Contiguous allocation, Paging, Segmentation.

OCTOBER

Virtual Memory: Demand paging, Performance of demand paging, Page replacement, Page replacement algorithms, Thrashing.
File management: File system Structure, Allocation methods: Contiguous allocation, Linked allocation, Indexed allocation, Free space management: Bit vector, Linked list, Grouping, Counting. Test

NOVEMBER

Device Management: Disk structure, Disk scheduling: FCFS, SSTF, SCAN, C-SCAN, LOOK, C-LOOK, Revision, Test.

LESSON PLAN (SESSION 2024-25)
(ODD SEMESTER)

Dr. Pooja Singh
Asstt. Professor, Computer Science Deptt.

For BCA 5th Semester
SUBJECT: Computer Graphics
PAPER CODE: BCA-302

JULY &AUGUST

Graphics Primitives: Introduction to computer graphics, Basics of Graphics systems, Application areas of Computer Graphics, overview of graphics systems, video-display devices, and raster-scan systems, random scan systems, graphics monitors and workstations and input devices.
Output Primitives: Points and lines, line drawing algorithms, mid-point circle and ellipse algorithms. Filled area primitives: Scan line polygon fill algorithm, boundary fill and floodfill algorithms.

SEPTEMBER

2-D Geometrical Transforms: Translation, scaling, rotation, reflection and shear transformations, matrix representations and homogeneous coordinates, composite transforms, transformations between coordinate systems.
2-D Viewing: The viewing pipeline, viewing coordinate reference frame, window to viewport coordinate transformation, viewing functions, Cohen-Sutherland and Cyrus-beck line clipping algorithms, Sutherland – Hodgeman polygon clipping algorithm.

OCTOBER

3-D Object Representation: Polygon surfaces, quadric surfaces, spline representation, Hermite curve, Bezier curve and B-Spline curves, Bezier and B-Spline surfaces. Basic illumination models, polygon-rendering methods. Test

NOVEMBER

3-D Geometric Transformations: Translation, rotation, scaling, reflection and shear transformations, composite transformations.
3-D Viewing: Viewing pipeline, viewing coordinates, view volume and general projection transforms and clipping. Revision, Test.

LESSON PLAN (SESSION 2024-25)
(ODD SEMESTER)

Dr. Pooja Singh
Asstt. Professor, Computer Science Deptt.

For BBA 1st Semester
SUBJECT: Computer Fundamentals and Office Automation Tools
Course Code: 24IMSI401SE01

JULY &AUGUST

Introduction – definition, characteristics, and limitations of a computer, Digital and analog computers, major components of a digital computer, hardware, software, firmware, middleware, and freeware

SEPTEMBER

Decimal number system, hexadecimal number system, octal number system, binary number system, number system conversions, binary number addition and subtraction Uses of computers in offices and banks, Computer applications in business, education, and healthcare field, Test.

OCTOBER

Documentation using MS-Word – Creating and Editing a Document, Formatting Document, Auto-text, Autocorrect, Spelling and Grammar Tool, Document Dictionary, Page Formatting, Bookmark, Advance
Features of MS-Word, Mail Merge, Printing.
Electronic Spread Sheet using MS-Excel - Introduction to MS-Excel, Creating and Editing Worksheet, Formatting and Essential Operations, Formulas and Functions, Charts

NOVEMBER

Presentation using MS-PowerPoint: Presentations, Creating Manipulating and Enhancing Slides, Organizational Charts, Excel Charts, Word Art, Layering Art Objects, Animations and Sounds, .Revision, Test.

LESSON PLAN (SESSION 2024-25)
(ODD SEMESTER)

Dr. Pooja Singh
Asstt. Professor, Computer Science Deptt.

For BBA 5TH Semester
SUBJECT: CYBER SECURITY
PAPER CODE: BBAN-506

JULY &AUGUST

Concept of information society, knowledge society, cyber space, digital economy, critical infrastructure. Critical information infrastructure, internet as global Information infrastructure.

SEPTEMBER

Cyber terrorism, terrorist atrocities, the role of IT by terrorist, the power of cyber terrorism, characteristic of cyber terrorism , factors contributing to the existence of cyber terrorism, real examples of cyber terrorism, political orientation of terrorism, economic consequences, Cybercrime, types of cybercrime: hacking, virus, worm, Trojan horse, mall ware, fraud and theft, cyber homicide, current cyber-attack methods, Test.

OCTOBER

Criminal threats to IT infrastructure, web security, basic cyber forensics , internal penetration, external penetration, your role on cyberattacks. Cybercrimes and law, cyber jurisdiction, Indian IT ACT. Fundamental concepts of information security, information warfare, levels of information war, cost of information warfare.

NOVEMBER

Cyber disaster planning, why disaster planning, companywide disaster planning, business impact analysis.Revision, Test.

(Dr. POOJA SINGH)

ASSTT. PROFESSOR,

COMPUTER SCIENCE DEPTT.