



**PREM CHAND MARKANDA SD COLLEGE FOR WOMEN,
JALANDHAR CITY**

Re-accredited 'A⁺⁺' grade (2nd Cycle) by NAAC Bangalore

A unique prestigious Post Graduate Institution of Northern India

**DEPARTMENT OF PG DEPARTMENT OF COMPUTER SCIENCE & IT
(Session 2025-26)**

Program: B.Voc (Web Designing & Development) (IT)

Program Outcome: PO No.	Upon Completion of the BVOC Web Designing and Development (IT) Programme, the graduates will be able to:
PO.1	Gain proficiency in HTML and JavaScript to create dynamic web pages and the practical skills to develop various web applications.
PO.2	Acquire knowledge of current web development technologies and future trends, preparing them for the evolving IT
PO.3	Graduates will be capable of solving real-world problems through the design and development of both application and system software.
PO.4	Possess industry-specific skills directly applicable to job roles in web development.
PO.5	Prepare for employment and for a career of life-long learning in web development and related fields.

Teaching Plan
Session 2025-26
Odd Semester
CLASS: B.Voc (Web Designing & Development) (IT)(Sem-V)
SUBJECT: Word Press Framework
Faculty Name: Ms. Navjot Kaur

TOPIC	DURATION	TEACHING TOOLS
Installing Word Press: Uploading Word Press to your web server, Installing Word Press, Database Connectivity, Theme Customization Configuring Word Press: Using the Word Press dashboard, Managing content in the Word Press dashboard	July-August	● Technology based Learning ● Experimental Learning
Types of users, The Word Press settings panel, Reading and writing settings, Permalinks and RSS feeds, Creating and managing posts, Setting up post categories, Creating and managing pages, Managing comments, Installing and updating plug-ins, Customizing Word Press themes, Word Press theme options	September	● Traditional learning ● Group Discussion
Advanced Topics: Word Press Security / backup / domain transfers, Migration from Different Platforms, Optimization of Wardress Website Word Press SEO: On Page SEO, SEO Plug-in	October	● Use Projector ● Technology used ● Grab knowledge by discussing ideas
Commencement of exams	November	

Course outcome

CO.1	Students will be able to install and configure WordPress on a web server, including database connectivity and theme customization.
CO.2	Students will be able to navigate and manage the WordPress dashboard, create and organize content, and configure user roles and site settings.
CO.3	Students will be able to customize WordPress websites using themes, plug-ins, categories, pages, and comment management.

CO.4	Students will be able to implement advanced WordPress management practices, including security, backups, migrations, and performance optimization.
CO.5	Students will be able to apply WordPress SEO strategies such as on-page optimization and the use of SEO plug-ins to improve website visibility.

Teaching Plan

Session 2025-26

Odd Semester

CLASS: B.Voc (Web Designing & Development) (IT)(Sem-V)

SUBJECT: Web Technology Using ASP.NET

Faculty Name: Dr. Lovely Sharma

Topic	Duration	Teaching Tools
Standard Controls: Display information, Accepting user input, Submitting form data, displaying images, using the panel control, using the hyperlink control. Validation Controls: Using the required field validation control, using the range validation control using the compare validation control, using the regular expression validation control, using the custom validation control, using the validation summary controls.	July	• Lecture based Teaching learning • Technology based learning • Learning through problem solving
Rich Controls: Accepting file uploads, displaying a calendar, Displaying advertisement, displaying different page views, displaying a wizard. Designing Website with Master Pages: Creating master pages, Modifying master page content, and Loading master page dynamically.	August	• Technology based learning • Learning through problem solving

SQL Data Source Control: Creating database connections, Executing database commands, Using ASP.NET parameters with the SQL data source controls, programmatically executing SQL data source commands, Caching database data with the SQL data Source controls. List Controls: Dropdown list control, Radio button list controls, list box controls, bulleted list controls, custom list controls.	September	• Expeditionary learning • Learning through problem solving • Technology based learning
Grid View Controls: Grid view control fundamentals, using field with the grid view control, working with grid view control events extending the grid view control. Building Data Access Components with ADO.NET: Connected the data access, disconnected data access, Executing a synchronous database commands, Building data base objects with the .NET framework	October	• Learning through problem solving • Inquiry based learning • Technology based learning
Commencement of University Exams	November	

Course Outcome

CO.1	Web Developer – Gain proficiency in using standard and rich controls (e.g., file uploads, calendar, and advertisement display) to create interactive and dynamic websites.
CO.2	Frontend Designer – Learn to design user-friendly interfaces using validation controls, master pages, and custom components, ensuring a consistent and engaging user experience.
CO.3	Database Developer – Acquire skills in managing SQL data source controls, executing database commands, and working with ASP.NET parameters for seamless data interaction.
CO.4	Application Programmer – Build expertise in ADO.NET for both connected

	and disconnected data access models, synchronizing databases with the .NET framework for efficient performance.
CO.5	Full-Stack Developer – Master the integration of ASP.NET controls, dynamic page loading, and database caching techniques to build scalable and high-performance web applications.

Teaching Plan

Session 2025-26

Odd Semester

CLASS: B.Voc (Web Designing & Development) (IT)(Sem-V)

SUBJECT: Cyber Forensics, Cyber Crimes, Cyber Security & Cyber Law

Faculty Name: Dr Inderjit Kaur

TOPIC	DURATION	TEACHING TOOLS
Computer and Cyber Forensic Basics- Introduction to Computers, Computer History, Software, Hardware, Classification, Computer Input-Output Devices, Basic Computer Terminology, Internet, Networking, Computer Storage, Cell Phone / Mobile Forensics, Computer Ethics and Application Programs, Cyber Forensic Basics- Introduction to Cyber Forensics, Storage Fundamentals, File System Concepts, Data Recovery, Operating System Software and Basic Terminology Data and Evidence Recovery- Introduction to Deleted File Recovery, Formatted Partition Recovery, Data Recovery Tools, Data Recovery Procedures and Ethics, Preserve and safely handle original media, Document a “Chain of Custody”, Complete time line analysis of computer files based on file creation, file modification and file access, Recover Internet Usage Data, Recover Swap Files/Temporary Files/Cache Files, Introduction to Encase Forensic Edition, Forensic Tool Kit (FTK) etc, Use computer forensics software tools to cross validate findings in computer evidence-related cases.	July-August	● Technology -based learning ● Experiential learning
Cyber Crimes and Cyber Laws- Introduction to IT laws & Cyber Crimes– Internet, Hacking, Cracking, Viruses, Virus Attacks, Pornography,	September	● Peer Teaching ● Learning through Problem Solving

Software Piracy, Intellectual property, Legal System of Information Technology, Social Engineering, Mail Bombs, Bug Exploits, and Cyber Security etc. Cyber Forensics Investigation- Introduction to Cyber Forensic Investigation, Investigation Tools, Discovery, Digital Evidence Collection, Evidence Preservation, E-Mail Investigation, E-Mail Tracking, IP Tracking, E-Mail Recovery, Encryption and Decryption methods, Search and Seizure of Computers, Recovering deleted evidences, Password Cracking		● Technology-Based Learning
Cyber Security- Introduction to Cyber Security, Implementing Hardware Based Security, Software Based Firewalls, Security Standards, Assessing Threat Levels, Forming an Incident Response Team, Reporting Cyber crime	October	● Individual learning ● Experimental Learning ● Traditional Learning
Operating System Attacks, Application Attacks, Reverse Engineering & Cracking Techniques and Financial Fraud	November	● Individual learning ● Experimental Learning ● Traditional Learning

Course outcome

CO.1	Computer and Cyber Forensic Basics- Introduction to Computers, Computer History, Software, Hardware, Classification, Computer Input-Output Devices, Basic Computer Terminology, Internet, Networking, Computer Storage, Cell Phone / Mobile Forensics, Computer Ethics and Application Programs, Cyber Forensic Basics
CO.2	Use computer forensics software tools to cross validate findings in computer evidence-related cases.
CO.3	Cyber Crimes and Cyber Laws- Introduction to IT laws & Cyber Crimes– Internet, Hacking, Cracking, Viruses, Virus Attacks, Pornography, Software Piracy, Intellectual property, Legal System of Information Technology, Social Engineering, Mail Bombs, Bug Exploits, and Cyber Security etc
CO.4	Cyber Security- Introduction to Cyber Security, Implementing Hardware Based Security, Software Based Firewalls, Security Standards,
CO.5	Assessing Threat Levels, Forming an Incident Response Team, Reporting Cyber crime, Operating System Attacks, Application Attacks, Reverse Engineering & Cracking Techniques and Financial Fraud.

Teaching Plan**Session 2025-26****Odd Semester****CLASS: B.Voc (Web Designing & Development) (IT)(Sem-V)****SUBJECT: Human Rights and Value Education****Faculty Name: Mrs. Sumanjit Kaur**

TOPIC	DURATION	TEACHING TOOLS
Concept of Human Values, Value Education Towards Personal Development: Aim of education and value education; Evolution of value oriented education; Concept of Human values; types of values; Components of value education. Personal Development: Self analysis and introspection; sensitization towards gender equality, physically challenged, intellectually challenged. Respect to - age, experience, maturity, family members, neighbors, co-workers. Character Formation towards Positive Personality: Truthfulness, Constructivism, Sacrifice, Sincerity, Self Control, Altruism, Tolerance, Scientific Vision.	July-August	• Technology based Learning • Experimental Learning
Impact of Global Development on Ethics and Values: Conflict of cross-cultural influences, mass media, cross-border education, materialistic values, professional challenges and compromise. Modern Challenges of Adolescent Emotions and behavior; Sex and spirituality: Comparison and competition; positive and negative thoughts. Therapeutic Measures : Control of the mind through a) Simplified physical exercise b) Meditation – Objectives, types, effect on body, mind and soul c) Yoga – Objectives, Types, Asana d) Activities: (i) Moralization of Desires (ii) Neutralization of Anger (iii) Eradication of Worries (iv) Benefits of Blessings	September	• Traditional learning • Group Discussion
Human Rights 1: Concept of Human Rights – Indian and International Perspectives a. Evolution of Human Rights b. Definitions under Indian and International documents 2. Broad classification of Human Rights and Relevant Constitutional Provisions a. Right to Life, Liberty and Dignity b. Right to Equality c. Right against Exploitation d. Cultural and	October	• Learning through problem solving • Inquiry based learning • Technology based learning

Educational Rights e. Economic Rights f. Political Rights g. Social Rights Human Rights of Women and Children a. Social Practice and Constitutional Safeguards (i) Female Feticide and Infanticide (ii) Physical assault and harassment (iii) Domestic violence (iv) conditions of Working Women 4. Institutions for Implementation a. Human Rights Commission b. Judiciary 5. Violations and Redressal a. Violation by State b. Violation by Individuals c. Nuclear Weapons and terrorism d. Safeguards.		
Commencement of Exams	November	

Course outcome

CO.1	Understand the concept of human values, value-oriented education, and their role in personal development and character formation.
CO.2	Develop sensitivity towards gender equality, respect for diversity, and positive personality traits such as truthfulness, tolerance, and sincerity.
CO.3	Apply therapeutic practices like physical exercise, meditation, and yoga for self-control, emotional balance, and overall well-being.
CO.4	Understand the concept, evolution, and broad classification of Human Rights along with relevant constitutional provisions at national and international levels.
CO.5	Analyze issues related to human rights violations, safeguards, and the role of institutions such as the Human Rights Commission and Judiciary in protection and enforcement.