Rajiv Gandhi Govt. College Saha (AMBALA)

(Affiliated to Kurukshetra University, Kurukshetra)

('B+' Grade, NAAC Accrediated)

|| तमसो मा ज्योतिर्गमय ||

"अंधेरे से मुझे प्रकाश की ओर ले चलो"

"From darkness, Lead me to Light"

Computer Science Department

Program Outcomes
Program Specific Outcomes
And Learning Outcomes

According to

Curriculum Framework for Under-Graduate Programmes

As per NEP-2020 (Multiple Entry-Exit, Internships and Choice Based Credit System)

DEPARTMENT OF COMPUTER SCIENCE & APPLICATIONS

(For the Batches Admitted from 2023-2024)

Lesson Plan Aug-Nov 2025

Program Outcomes (POs)	Broad outcomes expected from graduates of the Computer Science program are: 1. Apply knowledge of mathematics, science, and basic computing principles to solve computer science problems. 2. Identify, formulate, and analyze real-world problems and reach meaningful solutions using computer science fundamentals. 3. Design and implement effective solutions for software-based problems with appropriate tools and techniques. 4. Apply modern computing tools and techniques necessary for solving problems in computer science. 5. Understand and commit to professional ethics, cyber laws, and responsibilities in computing practices. 6. Recognize the need for and engage in independent and lifelong learning in the field of computer science.
Program Specific Outcomes (PSOs)	**PSO 1:** Apply fundamental knowledge of computer science to develop robust, secure, and efficient software solutions. **PSO 2:** Utilize appropriate data structures, algorithms, and databases to analyze and solve computational problems. **PSO 3:** Demonstrate understanding of basic operating systems, computer hardware, and system-level programming. **PSO 4:** Design and manage databases effectively using relational models and SQL. **PSO 5:** Develop well-structured programs using structured and object-oriented programming paradigms. **PSO 6:** Apply theoretical knowledge in practical scenarios through lab sessions, mini-projects, and real-world simulations.

Class:	**B.Sc.-I (Semester-1)**
Course Title:	**Basics of Computer Science**
Course Objectives (Cos)	**The course will aim to:** CO1: Introduce the fundamentals of computers, including their evolution, classification, and architecture. CO2: Familiarize students with different types of software and programming languages. CO3: Explain the basic concepts and functionality of operating systems, especially Windows. CO4: Introduce the fundamentals of r networking and internet technologies. CO5: Provide hands-on understanding of managing files, folders, and using basic system utilities.
Course Learning	CLO1: Describe the fundamental concepts of computers, including their types, history, and architecture.

Outcomes (CLO)	CLO2: Identify different types of software and understand the role of programming languages, compilers, and interpreters. CLO3: Explain the types, features, and functions of operating systems with hands-on familiarity with Windows OS. CLO4: Perform basic file and folder operations within a GUI-based operating system like Windows. CLO5: Understand the basic concepts of computer networking, data transmission media, and types of networks (LAN, MAN, WAN). CLO6: Explain the basic functioning of the Internet, World Wide Web, and demonstrate the use of web browsers.

Class:	**B.A./B.Com/B.Sc.-I (Semester-1)**
Course Title:	**Basic I.T. Tools (SEC)**
Course Objectives (Cos)	**The course will aim:** CO1: To provide students with a foundational understanding of computer components and terminology. CO2: To familiarize students with the functionality and applications of operating systems on desktop and mobile devices. CO3: To enable students to comprehend and utilize computer networks, internet browsing, content search, email, and peer collaboration tools. CO4: To equip students with skills to use e-Governance applications and enhance existing skills while learning new ones using computers. CO5: To develop practical skills in implementing various spreadsheet tools.
Course Learning Outcomes (CLO)	CLO1: Identify the basic components of computers and terminology. CLO2: Acquaint with Operating System and its applications for both desktop and mobile devices. CLO3: Understand computer networks, and browse the inter- net, content search, email and collaborate with peers. CLO4: Use e-Governance applications and use computer to improve existing skills and learn new skills. CLO5: Implement various spreadsheet tools practically.

Class:	**B.Sc.-II (Semester-3)**
Course Title:	**Operating System**
Course Objectives (Cos)	**The course will aim:** CO1: To introduce the fundamental concepts of computers, including hardware and software components. CO2: To provide an understanding of input/output devices and the role of operating systems in managing hardware resources. CO3: To familiarize students with the internet, its architecture, and commonly used internet services. CO4: To create awareness about common cybersecurity threats and the essential principles of computer security. CO5: To integrate knowledge of operating systems, internet technologies, and security practices for effective computing.
Course Learning Outcomes (CLO)	CLO1: To understand the basics of computer. CLO2: To learn about I/O devices and operating systems. CLO3: To understand internet and its services. CLO4: To learn about the threats and security concepts on computers. CLO5: To understand the working of operating system, internet and security related concepts.