



# Sunbeam College for Women



Autonomous Post Graduate College  
Accredited 'A' Grade by NAAC  
BHAGWANPUR, VARANASI-221005 (U.P.)

## **BCA VI Sem.**

# **ACADEMIC PLANNER**

## **2025-26**

# LECTURE PLAN(2025-26)

## Course Name: Computer Network Security

**Course Code:** BCA-S307  
**Faculty Name:** Mr. Abhishek Sharma

Lecture Plan				
Month	UNIT	Week	No. of Planned Lecture	Topic
<b>J A N</b>	I	1 <sup>st</sup>	0	---
		2 <sup>nd</sup>	4	<b>Introduction:</b> Attack Services and Mechanism Model for Internetwork Security
		3 <sup>rd</sup>	3	Cryptography: Notion of Plain Text
		4 <sup>th</sup>	3	Cryptography: Encryption
		5 <sup>th</sup>	4	Key, Cipher Text Decryption and cryptanalysis
<b>F E B</b>	I and II	1 <sup>st</sup>	4	Public Key Encryption, digital Signatures
		2 <sup>nd</sup>	4	Digital Signatures and Authentication.
		3 <sup>rd</sup>	4	Network Security: Authentication Application: Kerberos
		4 <sup>th</sup>	4	IP security Architecture: Overview, Authentication header
<b>M A R</b>	II and III	1 <sup>st</sup>	1	IP security Architecture: Authentication header
		2 <sup>nd</sup>	4	Encapsulating Security Pay Load combining Security Associations
		3 <sup>rd</sup>	3	Key Management, Web Security: Requirement,
		4 <sup>th</sup>	3	Secure Sockets Layer, Transport Layer Security, and Secure Electronic Transactions
		5 <sup>th</sup>	0	---
<b>A P R</b>	IV and V	1 <sup>st</sup>	3	Network Management Security: Overview of SNMP Architecture-
		2 <sup>nd</sup>	4	SMMPV11 Communication Facility, SNMPV3
		3 <sup>rd</sup>	4	System Security: Intruders
		4 <sup>th</sup>	4	Viruses and Related Threats Firewall Design Principles.
		5 <sup>th</sup>	2	Comprehensive examples using available software platforms/case tools
<b>Total Classes</b>		<b>Planned:</b>		<b>58</b>

### Referential Books:

1. W. Stallings, Networks Security Essentials: Application & Standards, Pearson Education, 2000.
2. W. Stallings, Cryptography and Network Security, Principles and Practice, Pearson Education, 2000.

## LECTURE PLAN (2024-25)

Course Name: Information System: Analysis, Design & Implementation

Course Code: BCA-S308

Faculty Name: Ms. Anita Shah

Lecture Plan				
Month	UNIT	Week	No. of Planned Lecture	Topic
<b>J A N U A R Y</b>	<b>I</b>	1 <sup>st</sup>	-	
		2 <sup>nd</sup>	4	Overview of System Analysis and Design, SDLC concept and Models: requirements determination, logical design, physical design, test planning, implementation, planning and performance evaluation communication,
		3 <sup>rd</sup>	3	Interviewing, presentation skills, group dynamics; risk and feasibility analysis group-based approaches, JAD, structures walkthroughs, and design and code reviews
		4 <sup>th</sup>	3	Prototyping; database design software quality metrics application categories software package evaluation and acquisition
		5 <sup>th</sup>	4	Information Requirement Analysis: Process modeling with physical logical data flow diagrams
<b>F E B R U A R Y</b>	<b>II</b>	1 <sup>st</sup>	4	data modeling with logical entity relationship diagrams Developing a Proposal: Feasibility study and cost estimation
		2 <sup>nd</sup>	4	System Design: Design of input and control, design of output and control, file design/database design,
		3 <sup>rd</sup>	4	process, user interface design, prototyping; software constructors; documentation
		4 <sup>th</sup>	4	Application Development Methodologies and CASE tools:
		5 <sup>th</sup>	-	
<b>M A R C H</b>	<b>III</b>	1 <sup>st</sup>	1	Information engineering, structured system analysis and design
		2 <sup>nd</sup>	4	, and object-oriented methodologies for application development data modeling
		3 <sup>rd</sup>	3	process modeling, user interface design, prototyping
		4 <sup>th</sup>	3	use of computer aided software engineering (CASE) tools in the analysis design
		5 <sup>th</sup>	-	
<b>A P R I L</b>	<b>IV</b>		3	implementation of information systems, Object oriented analysis and design through object modelling technique,
			4	Design and Implementation on OO Platform: object modelling, dynamic modelling and functional object-oriented design
			4	object oriented programming systems for implementation, object-oriented data bases, Managerial issues in Software Projects:
			4	Introduction to software markets; planning of software projects, size and cost estimates Project scheduling; measurement of software quality and productivity,
			2	ISO, capability maturity models for organizational growth.
<b>Total Classes</b>		<b>Planned:</b>	<b>58</b>	

**LECTURE PLAN (2025-26)****BCA-VI Sem.****Course Name:** E-Commerce**Course Code:** BCA-S309**Teacher Name:** Suman Mishra Tiwari

<b>Lecture Plan</b>				
<b>Month</b>	<b>UNIT</b>	<b>Week</b>	<b>No. of Planned Lecture</b>	<b>Topic</b>
<b>Jan</b>	<b>I</b>	1 <sup>st</sup>	----	
		2 <sup>nd</sup>	<b>3</b>	UNIT-I Introduction to E-Commerce: The Scope of Electronic Commerce, Definition of Electronic Commerce, Electronic E-commerce and the Trade Cycle, Electronic Markets, Electronic Data Interchange, Internet Commerce, E-Commerce in Perspective. Business Strategy in an Electronic Age: Supply Chains,
		3 <sup>rd</sup>	<b>4</b>	Porter's Value Chain Model, Inter Organizational Value Chains, Competitive Strategy, Porter's Model, First Mover Advantage, Sustainable Competitive Advantage, Competitive Advantage using E-Commerce, Business Strategy, Introduction to Business Strategy, Strategic Implications of IT,
		4 <sup>th</sup>	<b>3</b>	Technology, Business Environment, Business Capability, Exiting Business Strategy, Strategy Formulation & Implementation Planning, E-Commerce Implementation, E-Commerce Evaluation., Business-to-Business Electronic Commerce: Characteristics of B2B EC, Models of B2B EC, Procurement, Management Using the Buyer's Internal Marketplace,
		5 <sup>th</sup>	<b>3</b>	Just in Time Delivery, Other B2B Models, Auctions and Services from Traditional to Internet Based EDI, Integration with Back-end Information System, The Role of Software Agents for B2B EC, Electronic marketing in B2B, Solutions of B2B EC, Managerial Issues,
<b>Feb</b>	<b>II</b>	1 <sup>st</sup>	<b>4</b>	Electronic Data Interchange (EDI), EDI: The Nuts and Bolts, EDI & Business. Internet and Extranet: Automotive Network Exchange, The Largest Extranet, Architecture of the Internet, Intranet and Extranet, Intranet software, Applications of Intranets, Intranet Application Case Studies
		2 <sup>nd</sup>	<b>4</b>	Considerations in Intranet Deployment, The Extranets, The structures of Extranets, Extranet products & services, Applications of Extranets, Business Models of Extranet Applications, Managerial Issues.
		3 <sup>rd</sup>	<b>4</b>	Electronic Payment Systems: Is SET a failure, Electronic Payments & Protocols, Security Schemes in Electronic payment systems, Electronic Credit card system on the Internet,
		4 <sup>th</sup>	<b>4</b>	Electronic Fund transfer and Debit cards on the Internet, Stored – value Cards and E- Cash, Electronic Check Systems, Prospect of Electronic Payment Systems, Managerial Issues.
		5 <sup>th</sup>	----	
<b>March</b>	<b>III &amp; IV</b>	1 <sup>st</sup>	<b>1</b>	Public Policy: From Legal Issues to Privacy: EC- Related Legal Incidents,
		2 <sup>nd</sup>	<b>4</b>	Legal Incidents, Ethical & Other Public Policy Issues, Protecting Privacy,
		3 <sup>rd</sup>	<b>3</b>	Protecting Intellectual Property, Free speech
		4 <sup>th</sup>	<b>3</b>	Internet Indecency & Censorship, Taxation & Encryption Policies
		5 <sup>th</sup>	<b>1</b>	Taxation & Encryption Policies
<b>April</b>	<b>V</b>	1 <sup>st</sup>	<b>2</b>	Other Legal Issues: Contracts, Gambling & More, Consumer & Seller Protection In EC.
		2 <sup>nd</sup>	<b>4</b>	Infrastructure For EC : It takes more than Technology.
		3 <sup>rd</sup>	<b>4</b>	A Network Of Networks, Internet Protocols, Web- Based client/ Server, Internet Security
		4 <sup>th</sup>	<b>4</b>	selling on the web, Chatting on the Web, Multimedia delivery,
		5 <sup>th</sup>	<b>2</b>	Analyzing Web Visits, Managerial Issues.
<b>Total Planned Lectures:</b>				

## Reference Books:

1. David Whitely, "E-Commerce", Tata McGraw Hill, 2000
2. Eframi Turban, Jae Lee, David King, K. Michael Chung, "Electronic Commerce", Pearson Education, 2000

**LECTURE PLAN (2025-26)**  
**BCA-VI Sem.**

**Course Name:** Knowledge Management

**Course Code:** BCA-S310

**Teacher Name:** Suman Mishra Tiwari

<b>Lecture Plan</b>				
<b>Month</b>	<b>UNIT</b>	<b>Week</b>	<b>No. of Planned Lecture</b>	<b>Topic</b>
<b>Jan</b>	<b>I</b>	1st		
		2nd	3	Business Intelligence and Business Decisions
		3rd	3	Modeling Decision Process
		4th	4	Decision support systems
		5th	4	Group decision support.
<b>Feb</b>	<b>II</b>	1st	4	Groupware Technologies
		2nd	4	Executive Information and support Systems.
		3rd	4	OLTO & OLAP;
		4th	4	Data Warehousing.
		5th	----	
<b>March</b>	<b>III</b>	1st	-----	
		2nd	4	Data Marts, Data Warehouse architecture. Tools for data warehousing.
		3rd	4	Multi- Dimensional analysis
		4th	4	Data mining and knowledge discovery Data mining Techniques
		5th	1	Data mining of Advance Databases
<b>April</b>	<b>IV</b>	1st	2	Knowledge Management Systems
		2nd	4	Concept and Structure KM systems
		3rd	3	techniques of knowledge management appreciation
		4th	4	Knowledge Management Systems limitation
		5th	4	Data mining and knowledge discovery
<b>Total Planned Lectures:60</b>				

**Reference Books:**

1. Decision support system, EIS, 2000
2. W.H.Inmon, "Building Data Warehousing", Willey, 1998.
3. Han, Jiawei, Kamber, Micheline, "Data Mining Concepts & Techniques", Harcourt India, 2001