Semester Lecture Plan

Name of the college: Government College of Arts, Science and Commerce, Sanquelim - Goa

Name of Faculty: Shubham Naik | **Subject: Computer Science   Division:**

Paper code: CSC 133 Cyber Security Essentials | **Program/Course: F.Y.Bcom.   Total Lectures: 45**

Academic year: 2024- 2025 | **Semester: II**

Course Objectives:

This course is intended to:

To introduce principles of cyber security and have an understanding on the cyber-crimes taking place.

To have an understanding of the existing legal framework and laws on cyber security.

To enable students to adopt safe practices when using social media platforms and digital payment systems.

Course Outcomes

Students will,

Remember the concept of Cyber Crime & Cyber security and issues and challenges associated with it.

Understand the nature of cyber crimes, legal remedies and as to how to report the crimes through available platforms and procedures.

Explain various privacy and security concerns on online social media and the reporting procedure of inappropriate content, underlying legal aspects and best practices for the use of Social media platforms.

Student learning outcomes

To understant the basics of Cybersecurity

To understant the basics of Cyber crimes and cyber laws

To understant the basics of cyber security on social media

To understant the basics of cyber security on e-commerce and digital payments

Month	Lectures		No. of lectures allotted	Topic, Subtopic to be covered	Experiment/Assignment	ICT Tools	Reference books
	From:	To:					
Dec	09-12-2024	14-12-2024	3	**1. Introduction to Cyber security& Cyber crime and Cyber law** Defining Cyberspace and Overview of Computer and Webtechnology, Architecture of cyberspace, Communication and web technology, Internet, World Wide Web, Advent of internet,	Assignment	Powerpoint presentation	1. R. C Mishra(2010), "Cyber Crime Impact in the New Millennium", Authors Press 2. Nina Godbole, SunitBelapure (2011), "Cyber Security Understanding Cyber Crimes, Computer Forensics and Legal Perspectives", 1st Edition, Wiley India Pvt. Ltd.
	16-12-2024	21-12-2024	3	Internet infrastructure for data transfer and governance, Internet society, Regulation of cyberspace, Concept of cyber security,	Assignment		
JAN	02-01-2025	04-01-2025	3	Issues and challenges of cyber security. Classification of cyber-crimes, Common cyber-crimes, cybercrime targeting computers and mobiles,	Assignment		
	06-01-2025	11-01-2025	3	cyber-crime against women and children, financial frauds, social engineering attacks,	Assignment		

	13-01-2025	18-01-2025	3	malware and ransomware attacks, zero day and zero click attacks, Cybercriminals modus-operandi, reporting of cyber-crimes,	Assignment
	20-01-2025	25-01-2025	3	Remedial and mitigation measures, Legal perspective of cybercrime, IT Act 2000 and its amendments, Cyber-crime and offenses, Organizations dealing with Cybercrime and Cyber security in India, Case studies.	Assignment
	27-01-2025	01-02-2025	3	**2. Social Media Overview and Security** Introduction to Social networks. Types of Socialmedia, Social media platforms,	Assignment
FEB	03-02-2025	08-02-2025	3	Social media monitoring, Hashtag, Viralcontent, Social media marketing, Social media privacy,	Assignment
	10-02-2025	15-02-2025	3	Challenges,Opportunities and pitfalls in online social network, Security issues related to social media, Flagging and reporting of inappropriate content,	Assignment
	17-02-2025	22-02-2025	3	Laws regarding posting of inappropriate content, Best practices for the use of Social media,Case studies.	Assignment

			3	**3. E-Commerce and Digital Payments** Definition of E- Commerce, Main components of E-Commerce, Elements of E-Commerce security, E-Commerce threats,	
	24-02-2025	01-03-2025			Assignment
MAR	03-03-2025	08-03-2025	3	ECommerce security best practices, Introduction to digital payments, Components of digital payment and stakeholders,	Assignment
	10-03-2025	15-03-2025	3	Modes of digital payments- BankingCards, Unified Payment Interface (UPI),e-Wallets, Unstructured SupplementaryService Data (USSD), Aadhar enabled payments,	Assignment
	17-03-2025	22-03-2025	3	Digital payments related common frauds and preventive measures. RBI guidelines on digital payments and customer protection in unauthorized banking transactions. Relevant provisions ofPayment Settlement Act,2007.	Assignment
	24-03-2025	29-03-2025	3	**4. Digital Devices Security, Tools and Technologies for Cyber Security** End Point device and Mobile phone security, Password policy, Security patch management,	Assignment

APR	31-03-2025	05-04-2025	3	Data backup, Downloading and management of third-party software, Device security policy, Cyber Security best practices,	Assignment		
	07-04-2025	11-04-2025	3	Significance of host firewall and Ant-virus, Management of host firewall andAnti-virus, Wi-Fi security, Configuration of basic security policy and permissions.	Assignment		

Assessment Rubrics	Component	Max Marks
	ISA 1	7.5
	ISA 2	7.5
	ISA 3	7.5
	Practical	NA
	Project	NA
	SEE	60