

**HAILEY COLLEGE OF COMMERCE**

UNIVERSITY OF THE PUNJAB, LAHORE

Course Title: **Electronic Commerce**

Proposed Course Code: BSC-312

Credit Hours: 03

Program: BS Commerce

Semester: 6<sup>th</sup>**1.0 Introduction of the Course**

The course defines all the basic notions that allow the student to master the vocabulary of e-commerce i.e. of the set of initiatives that can be carried out on the Internet to support commercial activities. In particular, the course will introduce the student to the basic steps involved in the identification, design, and promotion of e-commerce services. Students will learn about the different types of e-commerce, the essential requirements to start an e-commerce service, the different possible solutions (portals, business communication on the Web, customer relationship management, on-line purchases, and virtual communities) and the factors that will determine how the service will be perceived by customers.

**2.0 Pre-Requisites Course (s) or Other Requirements/Skills:****3.0 The Course carries following objectives:**

At the completion of the course the student will be able to :-

1. Understand the e-commerce (Technology, Business, Society)
2. Understand role of internet/web in e-commerce

**4.0 Course Learning Outcomes**

1. Conception of Basic Knowledge of e-commerce and its implication in business
2. Understanding of e-commerce environment and its types
3. Understandability of features of e-commerce business models
4. Tapping the use of B2C business models
5. B2B business models
6. Tapping the use of C2C business models
7. Benefits of using on-line business models
8. Understanding the internet
9. infrastructure and elements involve in internet communication
10. **Usefulness of Electronic data interchange and Model used in EDI based transactions**
11. Learning of different on-line advertisement methods and their effectiveness with respect to web advertisement
12. Scope of on-line security problems and threats associated with on-line transaction
13. To learn about the Solutions of online security problems
14. Payment models used on the web.
15. Methods of online auctions and their effectiveness
16. Knowledge of different web server hardware and software technologies
17. Benefits and management of web server

**5.0 Course Contents:****Unit No.-I****Introduction to E-commerce**

- 1.1.1 Welcome to the course and Class introduction
- 1.1.2 Overview of the course objectives and outline
- 1.1.3 Business and Commerce
- 1.1.4 E-Business vs Ecommerce
- 1.1.5 How e-commerce differs from e-business
- 1.1.6 Unique Features of E-commerce technology
  - 1.1.6.1 Ubiquity o Global Reach o
  - 1.1.6.2 Universal Standards
  - 1.1.6.3 Information Richness
  - 1.1.6.4 Interactivity Information Density o
  - 1.1.6.5 Personalization / Customization o
  - 1.1.6.6 Social Technology/Social Marketing

**Unit No.-II**

- 2.1 Types of E-commerce.
  - 2.1.1 .Business-to-Consumer (B2C)
  - 2.1.2 Business-to-Business (B2B)
  - 2.1.3 Consumer-to-Consumer (C2C)

**Unit No.-III****3.1 Elements of E-commerce business model**

- 3.1.1 Web 2.0
- 3.1.2 Elements of E-Commerce Business Models.Customer value proposition,
- 3.1.3 Revenue model o Primary Revenue Models
- 3.1.4 Market Opportunity o Competitive Environment
- 3.1.5 Competitive Advantage
- 3.1.6 Market Strategy
- 3.1.7 Organizational Development
- 3.1.8 Management Team.

**Unit No.-IV****4.1 Major business-to-consumer business modes**

- 4.1.1 B2C Business Models.
- 4.1.2 Portal o E-Tailor o Content Provider
- 4.1.3 Transaction Broker o Market Creator
- 4.1.4 Service Provider
- 4.1.5 Community Provider

**Unit No.-V****5.1 Major business-to-business modes**

- 5.1.1 B2B Business Models.
- 5.1.2 E-distributor

- 5.1.3 E-procurement
- 5.1.4 Exchanges
- 5.1.5 Industry Consortia
- 5.1.6 Private Industrial Networks
- 5.1.7 Quiz

## **Unit No.-VI**

### **6.1 Models in Emerging E-commerce**

- 6.1.1 Business Models in Emerging E-commerce Areas
- 6.1.2 Consumer-to-Consumer (C2C) Business Models
- 6.1.3 Peer-to-Peer (P2P) Business Models
- 6.1.4 M-commerce Business Models
- 6.1.5 E-commerce Enablers
- 6.1.6 How the Internet and the Web Change Business: Strategy, Structure, and Process
- 6.1.7 Industry Structure
- 6.1.8 Industry Value Chains
- 6.1.9 Firm Value Chains

## **Unit No.-VII**

### **7.1 The Internet Infrastructure**

- 7.1.1 The Internet and World Wide Web (E-Commerce Infrastructure)
- 7.1.2 Introduction To Computers
- 7.1.3 Types of Computers o Introduction to Computer Networks
- 7.1.4 Introduction to Network Devices
- 7.1.5 Working of a Fire Wall o Types of Communication Media
- 7.1.6 Network Topologies
- 7.1.7 Internet, Intranet and Extranet
- 7.1.8 World Wide Web
- 7.1.9 Hypertext o Markup Languages
- 7.1.10 Web Servers and Clients
- 7.1.11 Web Browsers
- 7.1.12 The Internet and the Web: Features
- 7.1.13 E-mail
- 7.1.14 Instant Messaging
- 7.1.15 Search Engines
- 7.1.16 Intelligent Agents (Bots)
- 7.1.17 o Online Forums and Chat
- 7.1.18 Streaming Media o Cookies
- 7.1.19 New Web Features and Service
- 7.1.20 Quiz

## **Unit No.-VIII**

### **8.1 Electronic Data Interchange**

- 8.1.1 EDI
- 8.1.2 Definition
- 8.1.3 Difference between paper based and EDI based purchasing process
- 8.1.4 Model used in paper based purchasing process

- 8.1.5 Description of the model used in paper based purchasing process
- 8.1.6 Model used in EDI based purchasing process
- 8.1.7 Description of the model used in EDI based purchasing process
- 8.1.8 Examples of EDI based purchasing process
- 8.1.9 Benefits **of EDI based purchasing process**
- 8.1.10 Quiz

### **Unit No.-IX**

#### **9.1 Advertisement on the Web**

- 9.1.1 Introduction to web advertisement
- 9.1.2 Types of advertisement
- 9.1.3 Features of web advertisement
- 9.1.4 Issues in web advertisement
- 9.1.5 Difference of Mass marketing, Direct marketing and Interactive marketing

### **Unit No.-X**

#### **10.1 E-commerce Security System**

- 10.1.1 SECURITY
- 10.1.2 Introduction to web security environments
- 10.1.3 Goals of security
- 10.1.4 Types of internet frauds
- 10.1.5 Dimensions of e-commerce security
- 10.1.6 Security threats in the E-commerce environment
- 10.1.7 Structure of e-commerce transaction
- 10.1.8 Vulnerable points in an e-commerce environment
- 10.1.9 Hacking and Cyber vandalism
- 10.1.10 Types of hacking
- 10.1.11 Credit card frauds
- 10.1.12 Spoofing
- 10.1.13 DOS attack
- 10.1.14 DDOS attack
- 10.1.15 Sniffing
- 10.1.16 Insider jobs
- 10.1.17 Assignment and quiz

### **Unit No.-XI**

#### **11.1 E-commerce Security -Technology solutions**

- 11.1.1 Technology solutions of security problems
- 11.1.2 Encryption
- 11.1.3 Symmetric key encryption
- 11.1.4 Public key encryption
- 11.1.5 Public key encryption using Digital signatures

- 11.1.6 Hash algorithm
- 11.1.7 Public key cryptography with digital signature
- 11.1.8 Digital envelopes
- 11.1.9 Public key cryptography with Digital envelopes
- 11.1.10 Digital certificates and public key infrastructure
- 11.1.11 Certification authorities
- 11.1.12 Limits of encryption solutions
- 11.1.13 Quantum cryptography
- 11.1.14 SSL
- 11.1.15 S-HTTP
- 11.1.16 PPTP
- 11.1.17 Firewalls and proxy server
- 11.1.18 SET(secure electronic Transaction)

## **Unit No.-XII**

### **12.1 Online Payment System**

- 12.1.1 PAYMENT
- 12.1.2 Online Payment Basics 495
- 12.1.3 Types of payment system
- 12.1.4 Cash
- 12.1.5 Checking transfer
- 12.1.6 Credit card
- 12.1.7 Stored value
- 12.1.8 Accumulating balance
- 12.1.9 Dimensions of payment system

## **Unit No.-XIII**

### **13.1 Online Payment solutions**

- 13.1.1 Online Payment Basics
- 13.1.2 How an on-line credit card transaction works
- 13.1.3 Limitations of on-line credit card transactions
- 13.1.4 Digital wallets
- 13.1.5 Digital cash
- 13.1.6 On-line store value system
- 13.1.7 Smart cards as a stored value system
- 13.1.8 Digital accumulating balance system
- 13.1.9 Digital checking payment system
- 13.1.10 Assignment and quiz

## **Unit No.-XIV**

### **14.1 Online Auctions**

- 14.1.1 Auction Overview
- 14.1.2 Origins of Auctions
- 14.1.3 English Auctions
- 14.1.4 Dutch Auctions
- 14.1.5 First-Price Sealed-Bid Auctions
- 14.1.6 Second-Price Sealed-Bid Auctions

- 14.1.7 Open-Outcry Double Auctions
- 14.1.8 Sealed-Bid Double Auctions
- 14.1.9 Reverse (Seller-Bid) Auction
- 14.1.10 Online Auctions and Related Businesses

#### **Unit No.-XV**

##### **15.1 Web Server Hardware and Software**

- 15.1.1 Web Server Basics
- 15.1.2 Types of Web Sites
- 15.1.3 Web Clients and Web Servers
- 15.1.4 Dynamic Content
- 15.1.5 Various Meanings of “Server”
- 15.1.6 Web Client/Server Communication
- 15.1.7 Two-Tier Client/Server Architecture
- 15.1.8 Three-Tier and N-Tier Client/Server Architectures
- 15.1.9 Software for Web Servers
- 15.1.10 Operating Systems for Web Servers
- 15.1.11 Web Server Softwar
- 15.1.12 Finding Web Server Software Information

#### **Unit No.-XVI**

##### **16.1 Internet Utilities**

- 16.1.1 Electronic Mail (E-Mail)
- 16.1.2 E-Mail Benefits
- 16.1.3 E-Mail Drawbacks
- 16.1.4 Spam
- 16.1.5 Solutions to the Spam Problem
- 16.1.6 Web Site and Internet Utility Programs
- 16.1.7 Finger and Ping Utilities
- 16.1.8 Tracert and Other Route-Tracing Programs
- 16.1.9 Telnet and FTP Utilities
- 16.1.10 Indexing and Searching Utility Programs
- 16.1.11 Link-Checking Utilities
- 16.1.12 Remote Server Administration
- 16.1.13 Web Server Hardware
- 16.1.14 Server Computers
- 16.1.15 Web Server Hardware Architectures
- 16.1.16 Assignment and quiz

#### **6.0 Teaching-Learning Strategies**

- Lectures , Handouts , Group Discussions, Presentations, Quizzes

#### **7.0 Assignments-** Types and Number with calendar

**8.0 Assessment and Examinations:** As per University Rules

|                          |  |
|--------------------------|--|
| <b>Mid-Term</b>          | Written Paper  |
| <b>Final Examination</b> | Written Paper  |
| <b>Sessional</b>         | Quizzes and Tests, Assignment and Presentations,<br>Attendance, Class Participations and Discipline etc. |

**9.0 Textbooks**

In the detail course outline, one may mention chapters of the textbook with the content topic(s).

1. Kenneth c. laudon and carol guercio traver E- commerce (business, technology, society) 2008
2. Gary P. Schneider,Printed by B and Jo Enterprise Pte Ltd in Singapore 2007

**10. Suggested Readings****10.1 Books****10.2 Journal Articles/ Reports**