



Syllabus

First Semester Courses in Information Technology 2023-2024

Contents:

- Syllabus for Open Elective Courses:
 - USITY4501OE1: Web Designing
- Evaluation and Assessment guidelines



APPROVED SYLLABUS

**PRINCIPAL
ST. XAVIER'S COLLEGE
AUTONOMOUS
MUMBAI - 400 001.**

F. Y. B. Sc (Information Technology)

Course Code: USITY4501OE1

Title: Web Designing

Credits:2 (for Science Theory 2 (Total 30 hr)

Course Objectives:

To introduce the basic concepts of computer networks and brief knowledge about HTML concepts and to provide students with an understanding of the core technologies and concepts that underlie web development.

Course outcomes:

On completing the course, the student will be able to:

1. Develop the required skills needed to make a website quickly.
2. Acquire a foundational understanding of web technologies, including computer networks fundamentals, DNS, and cloud computing fundamentals.
3. Acquire proficiency in creating well-structured web pages and styling them using HTML and CSS.

Unit 1

Computer Network: What is a computer network, Components, Network, meaning of client and server, Architecture, Types of computer network, Networking Components and devices Network topology (Ring, star, bus, mesh), DNS, different types of DNS, DNS Resolution, 15

HTML: Introduction to HTML, Structure of HTML document, HTML Tags with attributes and examples, Text formatting tags(<i> <u> <strike> <abbr> <sub> <sup>) Heading tags, Paragraph tag, style tag Marquee tag, HTML Entities, Audio and video tag, List, Table, Forms.

Unit 2

Cascading Style Sheet: CSS and types of CSS (inline, internal, external). 15

Cloud Computing: What is cloud? and different types of cloud (public, private, hybrid), cloud service models.

Introduction to Google Forms and Google Sites.

List of Recommended Reference Books

1. Bayross, I. (2005). Web-enabled commercial applications development using HTML, DHTML, Javascript, Perl CGI [with CD]. New Delhi: Bpb Publication.
2. Powell, T. A. (2010). HTML & CSS: the complete reference. New York: Mcgraw-Hill.
3. Jain, M. (2003). Data Communication & Networking. India: BPB Publications.

ASSESSMENT:

THEORY:

CIA I: Written test for 20 marks

OR

Assignments / Project / Presentation / Case Study for 20 marks

End semester Exam :30 marks

Template for the Open Elective End Semester examination in Semester II

| UNITS | KNOWLEDGE | UNDERSTANDING | APPLICATION and ANALYSES | TOTAL MARKS- Per unit |
|---------------------------|-----------|---------------|--------------------------------|-----------------------------|
| 1 | 5 | 5 | 5 | 15 |
| 2 | 3 | 5 | 7 | 15 |
| | | | | |
| -TOTAL - Per objective | 8 | 10 | 12 | 30 |
| % WEIGHTAGE | 27% | 33% | 40% | 100% |



Syllabus

Second Semester Courses in Information Technology

2023-2024

Contents:

- Syllabus for Open Elective Courses:
 - USITY4502OE1: UI & UX Design
- Evaluation and Assessment guidelines

F. Y. B. Sc (Information Technology)

Course code: USITY4502OE1

Title: UI & UX Design

Credits:2 (for Theory 2 (Total 30 hr)

Prerequisite: A creative mindset.

Course Objectives:

To develop the abilities needed to work as a UX or UI designer. and applying UX & UI design principles, industry-recognized tools, and research techniques to guided projects that are covered in this course.

Course Outcomes:

On completing the course, the student will be able to:

1. Get ready for the profession, by creating a portfolio of projects done.
2. Acquire solid understanding of UI and UX design principles and concepts.
3. Prioritize user needs and preferences in the design process, resulting in user-friendly interfaces.

Unit 1

15

UI Fundamentals

What is User Interface Design?

The importance of UI as a face of the product/service

When to use what? Common UI elements and their usage.

The UI design process

UI Design principles: layout, color, typography, icons, graphics, and imagery

UX Design Concepts

Intersection of Design, Technology, & Business

What is User Experience Design?

The importance of UX in digital products

User Experience Design Process

UX Design principles: usability, accessibility, information architecture, user research, and user testing

UI and UX Design Tools

Introduction to UI design tools

Overview of UI design software

Hands-on training for designing digital products using these tools

Unit 2

15

User Research and Testing

Understanding user needs and behaviors

Conducting user research through surveys, interviews, and observations

Usability testing: planning and conducting tests, analyzing results, and implementing changes

UI and UX Design for Web and Mobile

-Designing responsive websites

-Mobile app design principles and best practices

-Designing for different screen sizes and resolutions

UI and UX Design Case Studies

Analysis of real-world UI/UX design projects

Understanding the design process and decision-making in successful projects

Learning from failures and challenges in UI/UX design projects

List Of Recommended Reference Books (list based on the most recent date of publication to oldest)

1. Weinschenk, S. (2011). 100 Things Every Designer Needs to Know About People. United Kingdom: Pearson Education.
2. Pressman, R. S. (2010). Software Engineering: A Practitioner's Approach. Singapore: McGraw-Hill Higher Education.

Additional Suggested Reading:

Krug, S. (2009). Don't Make Me Think: A Common-Sense Approach to Web Usability. Ukraine: Pearson Education.

ASSESSMENT:

THEORY:

CIA I: Written test for 20 marks

OR

Assignments / Project / Presentation / Case Study for 20 marks

End semester Exam :30 marks

Template for the Open Elective End Semester examination in Semester II

| UNITS | KNOWLEDGE | UNDERSTANDING | APPLICATION and ANALYSES | TOTAL MARKS- Per unit |
|---------------------------|-----------|---------------|--------------------------------|-----------------------------|
| 1 | 5 | 5 | 5 | 15 |
| 2 | 3 | 5 | 7 | 15 |
| | | | | |
| -TOTAL - Per objective | 8 | 10 | 12 | 30 |
| % WEIGHTAGE | 27% | 33% | 40% | 100% |
