

## ELECTIVE III

### 2CSE50E5: User Experience Design

[2 1 0 3 0]

#### Learning Outcomes:

Upon Completion of the course, the students will be able to

- Given a problem setting, critically discuss the appropriateness of potential user interface and experience design methods such as diary studies, storyboarding, experience design, etc.
- Describe the issues and challenges to achieving a human-centered design process, especially with regard to user experience design
- Develop an appreciation for the use of storytelling as a means of designing and evaluating user experience
- Use, adapt and extend design standards, guidelines, and patterns focusing on user experience
- Employ selected design methods at a basic level of competence: diary studies, mood boards, storyboarding, sketching, video scenarios, and experience prototyping
- Create storyboards, video scenarios, and experience prototypes for a small system and plan and perform a real world deployment study of a user experience

#### Course Overview

This course on user experience design following the user-centered design process. The course is oriented toward practical methods for approaching a design problem holistically, beyond usability and usefulness. In this course, you will develop an appreciation for the notion of user experience including how to design for it and how to evaluate it. The course will focus on UI design principles, process and communication of design ideas within a design team and to potential users. Assignments will focus on hands-on learning through individual assignments, application of design skills in group mini-projects, and peer critique. This introduces students to the methods and tools used in UI UX Design. It focuses on the early design stages of a product's lifecycle, and aims to ensure the UI/UX will meet user needs; some example tools and methods to be covered include personas, scenarios, storyboards, focus groups, wire-framing, prototyping, InVision, Axure, Balsamiq, etc. This course will serve as an introduction to these methods; no prior UI /UX design experience is necessary.

#### SYLLABUS

Unit No.	Topics	Lectures (Hours)
1	<ol style="list-style-type: none"><li>1. What is a UI?</li><li>2. Input &amp; Output controls and widgets</li><li>3. Web Site Critiques [web2.0 &amp; web3.0]</li><li>4. Web Design - Cleaning up the WWW</li><li>5. Design techniques such as scenarios, personas, storyboards, wire-framing, and information architecture.</li><li>6. App Design and its principles</li><li>7. Prototyping tools, both low-fidelity and high-fidelity.</li><li>8. Design for small screens, responsive design.</li></ol>	30

	<ul style="list-style-type: none"> <li>9. Non-GUI design (e.g., auditory interfaces, gesture interfaces).</li> <li>10. Pattern of UI / UX Design</li> <li>11. Understanding the Designing language of Desktop, Web and Mobile</li> <li>12. Flow &amp; Layout &amp; Organizational structures</li> <li>13. Swing Programming Intro &amp; Widgets</li> <li>14. UI Widgets &amp; Input Devices</li> <li>15. A process - Design vs. implementation</li> </ul>	
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**Tools required:**

Balsamiq, by Balsamiq Studios (<http://balsamiq.com>)

Axure RP Pro, by Axure Software Solutions (<http://www.axure.com/>)

InVision App, by InVision (<http://www.invisionapp.com/>)

**Reference Books:**

1. Buxton, B. (2007) Sketching User Experiences. Sketching User Experiences. San Francisco: Morgan Kaufmann. (Amazon)
2. Greenberg, S., Carpendale, S., Marquart, N., and Buxton, B. (2011) Sketching User Experiences: The Workbook. San Francisco: Morgan
3. Designing for Small Screens: Mobile Phones, Smart Phones, PDAs, Pocket PCs, Navigation Systems, MP3 Players, Game Consoles, by Studio 7.5, Zwick, and Schmitz, ISBN-10 # 2940373078