



Republic of the Philippines
SULTAN KUDARAT STATE UNIVERSITY
Isulan, Sultan Kudarat
College of Computer Studies
S.Y. 2024-2025



UNIVERSITY VISION

A trailblazer in arts, science and technology in the region.

UNIVERSITY MISSION

The University shall primarily provide advance instruction and professional training in science and technology, agriculture, fisheries, education and other related field of study. It shall undertake research and extension services, and provide progressive leadership in its area of specialization.

UNIVERSITY GOAL

To produce graduates with excellence and dignity in arts, science and technology.

UNIVERSITY OBJECTIVES

- a. Enhance competency development, commitment, professionalism, unity and true spirit of service for public accountability, transparency and delivery of quality services;
- b. Provide relevant programs and professional trainings that will respond to the development needs of the region;
- c. Strengthen local and international collaborations and partnerships for borderless programs;
- d. Develop a research culture among faculty and students;
- e. Develop and promote environmentally-sound and market-driven knowledge and technologies at par with international standards;
- f. Promote research-based information and technologies for sustainable development;
- g. Enhance resource generation and mobilization to sustain financial viability of the university.

Program Objectives and its relationship to University Objectives:

PROGRAM OBJECTIVES (PO)	UNIVERSITY OBJECTIVES						
	a	b	c	d	e	f	g
A graduate of BS Computer Science can:							
a. Design and implement effectively the innovative computing researches	/	/		/	/	/	/
b. Apply proficiently the algorithmic theories and related computational system in conducting researches;	/	/	/	/	/	/	/
c. design industry-based applications, infrastructures and technologies that will promote the advancement and development of the community;	/	/	/		/	/	/
d. demonstrate the code of conduct as well as the social and legal aspects of information technology	/	/		/	/	/	/

- 1. Course Code** : HCI 101
2. Course Title : Human Computer Interaction
3. Prerequisite :
4. Credits : 3 UNITS

5. Course Description:

This course performs design to different user populations with regard to their abilities and characteristics for using both software and hardware products. Evaluation of the design of existing user interfaces based on the cognitive models of target user.

6. Course Learning Outcomes and Relationships to Program Objectives

Course Learning Outcomes						Program Objectives				
At the end of the semester, the students can:						a	b	c	d	e
a. Understand the fundamental concepts of data structure and algorithms			/			/	/	/	/	/
b. Implement and analyze various data structures such as stacks, queues, list, trees, and graphs			/	/			/	/	/	/
c. Apply appropriate data structures to solve computational problems efficiently			/			/	/	/	/	/
d. Demonstrate proficiency in sorting and searching algorithms			/	/		/	/	/	/	/
e. Evaluate the performance of different data structures and algorithms in terms of time and space complexity			/	/		/				/
f. Develop problem-solving skills by implementing data structures and algorithms in programming.			/	/		/	/	/	/	/

7. Course Content

Course Objectives, Topics, Time Allotment	Desired Student Learning Outcomes	Outcomes-Based Assessment (OBA) Activities	Evidence of Outcomes	Course Learning Outcomes	Program Objectives	Values Integration
1. Topic: SKSU VMGO, Classroom Policies, Course Overview, Course Requirements, Grading System (2 hour)						
1. Discuss the VMGO of the university, classroom policies, scope of the course, course requirements and grading system	1.1 Student can be aware of and appreciate of the university's VMGO, classroom policies, course overview, requirements and grading system.	Individual participation in class discussion and group presentation	Group and individual discussions			Value of appreciation
2. Topic: Introduction and Basic Concepts of Human Computer Interaction (10hours)						
2.1 Component of Human Computer Interaction	2.1 Students can Identify and describe the major components of HCI, including the user, the computer, and the interaction interface.	Discussions and Lectures	Group and individual discussions	a, d, e, f	a, c, d	Unity and teamwork
2.2 Goals of Human Computer Interaction	2.2 Students can understand and explain the primary goals of HCI, such as usability, efficiency, and user satisfaction.	Problem Solving by Group Hands-on Activities	Rubrics Score Card for Group Activities Graded Laboratory Activities	a, d, e, f a, b, c, d	a, b, c a, b, c	Value of learning Value of newly acquired ideas

2.3 Factor of Human Computer Interaction	<p>2.3 Students can Identify and explain key factors that influence HCI, including cognitive psychology, ergonomics, and user experience.</p> <p>2.4 Students can identify various academic disciplines that contribute to HCI, such as computer science, psychology, design, and sociology.</p> <p>2.5 Students can articulate the significance of HCI in modern computing systems and applications.</p>	<p>Synchronous / Asynchronous Lecture</p>	<p>Graded Hands-on Activities</p>	<p>a, b, c, d</p>	<p>a, b, c</p>	<p>Value of focus</p>
2.4 Discipline Contributing to Human Computer Interaction						
2.5 Why Human Computer Interaction Important						
2.6 Common GUI and Web GUI	<p>2.6 Students can Define and distinguish between common Graphical User Interfaces (GUI) and Web GUIs.</p>					

3. Introduction to User Interface Design (7 hours)						
3.1 Keys aspects of User Interface Design	3.1 Students can Understand the concept and purpose of user interface (UI) design in HCI.	Discussions and Lectures Individual Problem Solving Hands-on Activities Synchronous / Asynchronous Lecture	Group and individual discussions Rubrics Score Card for Group Activities Graded Laboratory Activities Graded Activities Hands-on	a, d, e, f a, d, e, f a, b, c, d a, b, c, d	a, c, d a, b, c a, b, c a, b, c	Value of learning Value of newly acquired ideas Value of focus
3.2 User Interface Design Process	3.2 Students can identify and describe key principles of UI design, such as consistency, visibility, feedback, and simplicity					

4. User Centered Approach(8 hours)						
4.1 User Centered Design Process	4.1 Student can define what User-Centered Design (UCD) is and explain its core principles. and describe the phases of the UCD process, including user research, requirement analysis, design, testing, and evaluation. 4.2 Student can	Power Point Presentation Discussions and Lectures Group / Individual Activities Synchronous / Asynchronous Lecture	Quiz Graded Group Activities	a, b, d a, b, d	a, b, c a, b, c	Value of ideals Value of learning

4.2 UI Elements and Layout	Identify common user interface elements such as buttons, menus, forms, icons, and sliders and understand the purpose and function of each UI element in improving usability.						
5. Topic: Design , Prototyping and Construction (12 hours)							
5.1 Introduction to Prototyping	5.1 Student can Define prototyping and explain its purpose in the user interface design process and understand how prototypes help test and refine design ideas.	Discussions and Lectures Group/ individual Activities Synchronous / Asynchronous Lecture	Quiz Graded Laboratory Exam	a, b, d a, b, c	a, b, e a, b, c, e	Unity and teamwork Value of handwork	
5.2 Low and High Fidelity Prototyping	5.2 Students can differentiate between low-fidelity and high-fidelity prototypes and explain the advantages and limitations of each type of prototype						
5.3 Storyboarding	5.3 Students can describe what a storyboard is and its role in illustrating user interactions. 5.4 Students can understand the value of sketching in early design thinking and						

5.4 Sketching	create rough sketches to explore and communicate interface concepts.					
5.5 Conceptual Design	5.5 Students can define conceptual design and explain its role in bridging user needs with system functions. and develop basic conceptual models for user interfaces.					
5.6 Concrete Design	5.6 Students can explain the process of translating conceptual design into actual interface elements. and apply layout, visual style, and interaction patterns in concrete design.					

6. Topic: Evaluation (15 hours)							
6.1 The Why, what, where and When of Evaluation	6.1 Students can understand the purpose (why) of evaluating user interfaces.	Group Discussion Group / Activities	Quiz Graded Group Quiz	a, b, c, d a, b, c	a, b, c, e a, b, c, e	Value of Participation Value of Teamwork	
6.2 Types of Evaluation	6.2 Students can identify and describe different types of evaluation methods, such as formative vs. summative, qualitative vs. quantitative, and usability testing.	Synchronous / Asynchronous Lecture	Graded score for question-and-answer activities	a, b, c, d	a, b, c	Value of Participation	

6.3 The Language of Evaluation	6.3 Students can understand and use common terms related to evaluation, such as heuristics, metrics, feedback, task success, and error rate.					
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Total number of hours with laboratory (54 hours)

Lectures	52 hours
Examination	4 hours

8. Course Evaluation

Course Requirements :

Grading System:

MID-TERM and FINAL-TERM

Participation/Attendance	10%
Assignment	5%
Quiz	15%
Seatwork/lab exercises	20%
Exam	50%

Schedule of Examination:

**Midterm
Final Term
Classes End**

References:

Reference Books:

Jenny Preece, Yvonne Rogers and Helen Sharp. 2015. INTERACTION DESIGN Beyond Human Computer Interaction Fourth Edition John Wiley & Sons Ltd. Alan Dix, Janet E. Finlay, Gregory D. Abowd and Russell Beale. 2004. Human–Computer Interaction Third Edition, Pearson Education Limited Gerard JoungHyun Kim
Gerard JoungHyun Kim. 2015. Human–Computer Interaction Fundamentals and Practice, Taylor & Francis Group, LLCCRC Pres Alan Dix 3rd Edition . Human – Computer Interaction, Pearson Prentice Hall

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