	Universitas Negeri Surabaya Faculty of Engineering, Undergraduate Study Program in Informatics Engineering	Document Code

SEMESTER LEARNING PLAN

Courses	CODE	Course Family	Credit Weight			SEMESTER	Compilation Date
Human and Computer Interaction	5520202021		T=2	P=0	ECTS=3.18	3	July 17, 2024

AUTHORIZATION	SP Developer	Course Cluster Coordinator	Study Program Coordinator
	.....	.....	Aditya Prapanca, S.T., M.Kom.

Learning model: Project Based Learning

Program Learning Outcomes (PLO)

PLO study program that is charged to the course

Program Objectives (PO)

PO - 1	Can create user interface designs according to correct procedures
PO - 2	Can create user interface design documentation correctly

PLO-PO Matrix

P.O
PO-1
PO-2

PO Matrix at the end of each learning stage (Sub-PO)

P.O	Week															
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
PO-1																
PO-2																

Short Course Description: This course teaches about interaction between humans and computers, about the development of human-computer interaction, making good interfaces in making programs, future trends in human-computer interaction.

References

Main :

1. Dix, Alan et.al, HUMAN-COMPUTER INTERACTION, 2nd Edition, Prentice Hall, Europe, 1998.
2. Newman, W. M and Lamming, M. G, Interactive System Design, Addison Wesley, Cambrigde, Great Britain, 1995.
3. P. Insap Santoso, Interaksi Manusia dan Komputer : Teori dan Praktek, Andi Offset, Yogyakarta, 2004.
4. Raskin, J, The Human Interface, Addison Wesley, 2000
5. Shneiderman, B, Designing The User Interface, 3rd Edition, Addison Wesley, 1998
6. Sutcliffe, A. G., HUMAN-COMPUTER INTERFACE DESIGN, 2ND Edition, MacMillan, London, 1995.

Supporters:

Supporting lecturer: Ardhini Warih Utami, S.Kom., M.Kom.

Week-	Final abilities of each learning stage (Sub-PO)	Evaluation		Help Learning, Learning methods, Student Assignments, [Estimated time]		Learning materials [References]	Assessment Weight (%)
		Indicator	Criteria & Form	Offline (*offline*)	Online (*online*)		

(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
1	Students are able to recognize the basic concepts of Human and Computer Interaction	1.Explain the scope of IMK courses 2.Explains the why and what of IMK	**Criteria:** Student participation during question and answer time	Presentation, group discussion and reflection 2 X 50			0%
2	Students are able to recognize the basic concepts of Human and Computer Interaction	1.Mentions who is involved in IMK 2.Explain the concept and basis of IMK	**Criteria:** Student participation during question and answer time.	Presentation, group discussion and reflection 2 X 50			0%
3	Students are able to understand the principles of usability, process design and human capabilities	1.Explain the principles of usability 2.Distinguishing human abilities in making good and bad designs 3.Understand the sensing and motor systems found in humans 4.Explain the characteristics of memory 5.Explains human processes, observations and problem solving	**Criteria:** Student participation during question and answer time	Presentation, group discussion and reflection 2 X 50			0%
4	Students are able to carry out analysis in completing assignments	1.Explain Task Analysis techniques 2.Understand the types of task analysis, sources and uses of information 3.Understand input and output 4.Understand data collection tools and represent data	**Criteria:** Assessment of the selection of case studies taken and the systematicity of their completion using task analysis **Form of Assessment** : Participatory Activities	Presentations, discussions, assignments, exercises, searching for library sources and other references and reflection 2 X 50			20%

5	Students are able to create designs in the task analysis process	1. Explains the guidelines and principles in creating designs 2. Explains how to get ideas in making designs 3. Explain the challenges in creating a good, competitive design 4. Understand the principles of graphic design 5. Understand design typography 6. Explains font settings 7. Understand things related to color in graphic design 8. Explain icon design 9. Create a design in the task analysis process	**Criteria:** Student participation during debriefing and assessment during the design creation process in task analysis.	Presentations, discussions, exercises, project-based learning with interface design assignments and 2 X 50 reflections			0%
6	Students are able to describe various types of dialogue	1. Understand dialogue design 2. Explain the style dialog 3. Understand command language and related concepts such as attributes, advantages, risks, and design goals 4. Recognize WIMP, DM, PDA & pen, Speech forms 5. Explain the types and design of tools in User Interface Software 6. Explain the toolkit user interface 7. Explains GUI builder tools	**Criteria:** Student participation during the discussion process and written reports about the various dialogues that will be used to design the user interface **Form of Assessment** : Participatory Activities	Presentations, discussions, exercises, project-based learning with the task of determining dialogue types for interface design and reflection 2 X 50			20%
7	Students are able to design a display	1. Explains how to design an interface 2. Provides an overview of the process of designing an interface 3. Choose an approach model 4. Defining Interface Components 5. Determine the type of dialogue 6. Describe design documentation	**Criteria:** Pay attention to the number of types of dialogue used and the number of LKTs (display worksheets) that will be created.	Presentations, discussions, exercises, project-based learning with the task of designing a display and reflection 2 X 50			0%

8	Doing UTS questions		**Criteria:** According to the answer key	Written test 2 X 50			0%
9	Students are able to explain various types of interactive devices	1.Explain about interactive devices 2.Mention various types of interactive devices 3.Mention various types of I/O devices	**Criteria:** Student participation during question and answer time **Form of Assessment** : Participatory Activities	Presentation, Discussion, practice and reflection 2 X 50			0%
10	Students are able to explain ergonomic aspects	1.Understand ergonomic aspects 2.Describe the work station	**Criteria:** Student participation during question and answer time	Presentation, Discussion, practice and reflection 2 X 50			0%
11	Students are able to explain ergonomic aspects	1.Understand health aspects 2.Describe the ergonomic design of the workstation	**Criteria:** A written report of an assignment that describes the ergonomic aspects of a workstation	Presentation, Discussion, practice and reflection 2 X 50			0%
12	Able to design text and messages			UI Design Process Step 8 Write text and messages clearly: - Words, sentences, messages and texts - Content and text on web pages			0%
13	Able to design feedback, guidance and assistance effectively		**Form of Assessment** : Participatory Activities	UI Design Process Step 9 Provide effective feedback, guidance and assistance : - Provide appropriate feedback - Guidance and assistance			20%
14	Able to implement and design interfaces according to the stages that have been studied	1.correctness of explanation 2.completeness of explanation	**Form of Assessment** : Project Results Assessment / Product Assessment	All material taught includes: - User Interface (UI) and appropriate UI characteristics for each application - UI design process to produce quality UI			40%
15	Able to explain, present, collaborate in a team, and design	1.completeness of explanation 2.correctness of explanation 3. communicative level of presentation		Percentage of Major Tasks from each group			0%
16	Final exams		**Criteria:** 1.correctness of explanation 2.completeness of explanation				0%

Evaluation Percentage Recap: Project Based Learning

No	Evaluation	Percentage
1.	Participatory Activities	60%
2.	Project Results Assessment / Product Assessment	40%
		100%

Notes

1. **Learning Outcomes of Study Program Graduates (PLO - Study Program)** are the abilities possessed by each Study Program graduate which are the internalization of attitudes, mastery of knowledge and skills according to the level of their study program obtained through the learning process.
2. **The PLO imposed on courses** are several learning outcomes of study program graduates (CPL-Study Program) which are used for the formation/development of a course consisting of aspects of attitude, general skills, special skills and knowledge.
3. **Program Objectives (PO)** are abilities that are specifically described from the PLO assigned to a course, and are specific to the study material or learning materials for that course.
4. **Subject Sub-PO (Sub-PO)** is a capability that is specifically described from the PO that can be measured or observed and is the final ability that is planned at each learning stage, and is specific to the learning material of the course.
5. **Indicators for assessing** abilities in the process and student learning outcomes are specific and measurable statements that identify the abilities or performance of student learning outcomes accompanied by evidence.
6. **Assessment Criteria** are benchmarks used as a measure or measure of learning achievement in assessments based on predetermined indicators. Assessment criteria are guidelines for assessors so that assessments are consistent and unbiased. Criteria can be quantitative or qualitative.
7. **Forms of assessment:** test and non-test.
8. **Forms of learning:** Lecture, Response, Tutorial, Seminar or equivalent, Practicum, Studio Practice, Workshop Practice, Field Practice, Research, Community Service and/or other equivalent forms of learning.
9. **Learning Methods:** Small Group Discussion, Role-Play & Simulation, Discovery Learning, Self-Directed Learning, Cooperative Learning, Collaborative Learning, Contextual Learning, Project Based Learning, and other equivalent methods.
10. **Learning materials** are details or descriptions of study materials which can be presented in the form of several main points and sub-topics.
11. **The assessment weight** is the percentage of assessment of each sub-PO achievement whose size is proportional to the level of difficulty of achieving that sub-PO, and the total is 100%.
12. TM=Face to face, PT=Structured assignments, BM=Independent study.