	Universitas Negeri Surabaya **Faculty of Engineering,** **Bachelor of Information Systems Study Program**	**Document Code**

SEMESTER LEARNING PLAN

Courses		CODE	Course Family	Credit Weight			SEMESTER	Compilation Date
Human and Computer Interaction		5720103014		**T=3**	**P=0**	**ECTS=4.77**	2	July 17, 2024

AUTHORIZATION	SP Developer	Course Cluster Coordinator	Study Program Coordinator
	....	....	I Kadek Dwi Nuryana, S.T., M.Kom.

Learning model	**Project Based Learning**

Program Learning Outcomes (PLO)	**PLO study program that is charged to the course**	
	PLO-25	Have the ability to design and implement computer-based problem solving systems;
	Program Objectives (PO)	
	PO - 1	Students can create user interface design documentation correctly
	PO - 2	Students can implement user interface designs
	PLO-PO Matrix	

P.O	PLO-25
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, creating 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	Explain the scope of IMK courses	**Criteria:** 1. Student participation during attendance and question and answer = 20% 2. Assignment =30% 3. UTS = 20% 4. UAS = 30% **Forms of Assessment** : Participatory Activities, Project Results Assessment / Product Assessment, Practice / Performance, Tests	Presentation, group discussion and reflection 3 X 50		**Material:** Basic concepts of Human and Computer Interaction **Reference:** *P. Insap Santoso, Human and Computer Interaction: Theory and Practice, Andi Offset, Yogyakarta, 2004.*	3%
2	Students are able to define IMK and its relationship with other fields	1. Explain the scope of IMK courses 2. Explaining the Definition of IMK 3. Explain IMK's focus 4. Explain the relationship between IMK and other fields	**Criteria:** 1. Student participation during attendance and question and answer = 20% 2. Assignment =30% 3. UTS = 20% 4. UAS = 30% **Forms of Assessment** : Participatory Activities, Project Results Assessment / Product Assessment, Practice / Performance, Tests	Presentation, group discussion and reflection 3 X 50		**Material:** Definition of IMK and its relationship with other fields **Reference:** *P. Insap Santoso, Human and Computer Interaction: Theory and Practice, Andi Offset, Yogyakarta, 2004.*	3%
3	Students understand human factors as interface users	1. Explaining the similarities between humans and computers in IMK 2. Explain computer systems 3. Explain the anatomy of the human body related to the use of computer systems in IMK	**Criteria:** 1. Student participation during attendance and question and answer = 20% 2. Assignment =30% 3. UTS = 20% 4. UAS = 30% **Forms of Assessment** : Participatory Activities, Project Results Assessment / Product Assessment, Practice / Performance, Tests	Presentation, group discussion and reflection 3 X 50		**Material:** Human factors as interface users. **Reference:** *P. Insap Santoso, Human and Computer Interaction: Theory and Practice, Andi Offset, Yogyakarta, 2004.*	3%
4	Students are able to mention human senses in relation to IMK	1. Explain the sense of sight (eyes) in relation to IMK 2. Explaining Touch in relation to IMK 3. explains the sense of hearing in relation to IMK 4. explain parts of the human body (brain) in relation to IMK	**Criteria:** 1. Student participation during attendance and question and answer = 20% 2. Assignment =30% 3. UTS = 20% 4. UAS = 30% **Forms of Assessment** : Participatory Activities, Project Results Assessment / Product Assessment, Practice / Performance, Tests	Presentation, group discussion and reflection 3 X 50		**Material:** Human senses in relation to IMK **Library:** *P. Insap Santoso, Human and Computer Interaction: Theory and Practice, Andi Offset, Yogyakarta, 2004.*	3%

No	Ability	Indicators	Assessment	Learning Method	Task	Material / References	%
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:** 1. Participation in attendance and question and answer sessions = 20% 2. Assignment =30% 3. UTS=20% **Forms of Assessment** : Participatory Activities, Project Results Assessment / Product Assessment, Practices / Performance	Presentations, discussions, exercises, project-based learning with interface design assignments and 3 X 50 reflections		**Material:** Creating designs in the task analysis process **References:** *Newman, W. M and Lamming, M. G, Interactive System Design, Addison Wesley, Cambridge, Great Britain, 1995.*	4%
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	Determine the type of dialog that will be used for the 2 X 50 user interface design	**Material:** Various dialogues **References:** *Newman, W. M and Lamming, M. G, Interactive System Design, Addison Wesley, Cambridge, Great Britain, 1995.*	4%
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. **Form of Assessment** : Participatory Activities, Practice/Performance	Presentations, discussions, exercises, project-based learning with the task of designing a display and reflection 3 X 50		**Material:** Designing interfaces **References:** *Newman, W. M and Lamming, M. G, Interactive System Design, Addison Wesley, Cambridge, Great Britain, 1995.*	4%

8	Doing UTS questions		**Criteria:** According to the answer key **Form of Assessment** : Test	Written test 3 X 50		**Material:** UTS **Library:**	25%
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:** 1.Participation = 20% 2.TASK =30% 3.UTS=20% 4.UAS = 30% **Form of Assessment** : Participatory Activities, Practice/Performance	Presentation, Discussion, practice and reflection 3 X 50		**Material:** Interactive devices **References:** *Dix, Alan et.al, HUMAN-COMPUTER INTERACTION, 2nd Edition, Prentice Hall, Europe, 1998.*	3%
10	Students are able to explain ergonomic aspects	1.Understand ergonomic aspects 2.Describe the work station	**Criteria:** 1.Student participation during question and answer time = 20% 2.Assignment =30% 3.UTS=20% 4.UAS=30% **Form of Assessment** : Participatory Activities	Presentation, Discussion, practice and reflection 3 X 50		**Material:** Ergonomic aspects **References:** *Sutcliffe, AG, HUMAN-COMPUTER INTERFACE DESIGN, 2ND Edition, MacMillan, London, 1995.*	3%
11	Students are able to apply the principles of interface design	1.Explain the business activities of the organization 2.explains the approach method in designing organizational application interfaces 3.Defining Interface Components 4.Determine the type of dialogue	**Criteria:** 1.Participation = 20% 2.Duty 30% 3.UTS=20% 4.UAS=30% **Form of Assessment** : Participatory Activities, Practice/Performance	Discussion of organizational business activities and Practice of designing application interfaces for organizations 3 X 50		**Material:** Application of interface design principles. **Reference:** *P. Insap Santoso, Human and Computer Interaction: Theory and Practice, Andi Offset, Yogyakarta, 2004.*	3%
12	Students are able to create display worksheets	1.Create a display worksheet 2.Determines the number of worksheets adjusted to the number of views to be created	**Criteria:** 1.Participation=20% 2.Assignment =30% 3.UTS =20% 4.UAS=30% **Form of Assessment** : Participatory Activities, Practice/Performance	Presentation, Discussion, practice and reflection 3x50		**Material:** Designing Worksheets References : *P. Insap Santoso, Human and Computer Interaction: Theory and Practice, Andi Offset, Yogyakarta, 2004.*	4%
13	Students are able to identify and implement navigation and semantic paths in the interface	1.Arranging navigation on a display worksheet 2.Create a semantic net	**Criteria:** 1.Participation=20% 2.Assignment =30% 3.UTS=20% 4.UTS=20% 5.UAS = 30% **Form of Assessment** : Participatory Activities, Practice/Performance	Presentations, discussions, exercises, project-based with the task of designing a display worksheet for the display of a 3x50 program		**Material:** Application of Navigation and Semantic Nets on Worksheets References : *P. Insap Santoso, Human and Computer Interaction: Theory and Practice, Andi Offset, Yogyakarta, 2004.*	4%
14	Students are able to operate interface development tools (WIX.com)	1.Understand the features of the wix.com interface developer tool 2.Able to operate wix.com in implementing interface design	**Criteria:** 1.Cognitive tests 2.Participation 20% 3.Assignment =30% 4.UTS=20% 5.UAS = 30% **Form of Assessment** : Participatory Activities, Practice/Performance	Discussion, Practice 3x50		**Material:** Interface Developer Tools **Library:** *Sutcliffe, AG, HUMAN-COMPUTER INTERFACE DESIGN, 2ND Edition, MacMillan, London, 1995.*	0%

15	Students are able to create Graphical User Interface (GUI) applications	1.Produce a user interface from the display worksheet that was designed at the previous meeting 2.Implementing interface/user interface design in interface developer tools	**Criteria:** 1.Participation 20% 2.Assignment =30% 3.UTS=20% 4.UAS = 30% **Form of Assessment** : Participatory Activities, Practice/Performance	Presentation, Discussion, Practice 3x50		**Material:** Creating Graphical User Interface Applications **Reference:** *P. Insap Santoso, Human and Computer Interaction: Theory and Practice, Andi Offset, Yogyakarta, 2004.*	4%
16	simulate a GUI in a simple computer program.	Simulating user interface prototypes	**Criteria:** 1.Participation 20% 2.Assignment =30% 3.UTS=20% 4.UAS = 30% **Forms of Assessment** : Participatory Activities, Project Results Assessment / Product Assessment, Practices / Performance	Presentation and Practice 3x50		**Material:** Application of interface design in interface development tools. **Reference:** *P. Insap Santoso, Human and Computer Interaction: Theory and Practice, Andi Offset, Yogyakarta, 2004.*	30%

Evaluation Percentage Recap: Project Based Learning

No	Evaluation	Percentage
1.	Participatory Activities	32.33%
2.	Project Results Assessment / Product Assessment	14.33%
3.	Practice / Performance	25.33%
4.	Test	28%
		99.99%

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.