


SEMESTER LEARNING PLAN

	SURABAYA STATE UNIVERSITY FACULTY OF EDUCATION DEPARTMENT OF EDUCATIONAL CURRICULUM AND TECHNOLOGY EDUCATIONAL TECHNOLOGY S1 STUDY PROGRAM					Code Document
SEMESTER LEARNING PLAN						
COURSES (MK)	CODE	MK Group	WEIGHT (credits)		SEMESTER	date Compilation
Interactive Multimedia Development		Media Development	T=2	P=2		May 5, 2022
AUTHORIZATION		RPS Developer	RMK Coordinator		Head of Study Program	
			Dra. Sulistiowati, M.Pd. Dr. Andi Mariono, M.Pd Hirnanda Dimas Pradana, S.Pd., M.Pd.		Dr. Andi Kristanto, S.Pd., M.Pd.	
Achievements Learning (CP)	CPL-PRODI charged to MK					
	CPL-S8	Able to demonstrate a scientific, critical and innovative attitude in professional and responsible scientific technology learning	education			
	CPL-P2	Applying educational technology knowledge as a Learning Technology Developer, Education and Training Analyst, and Multimedia/Animation/Broadcast Teacher				
	CPL-KK4	Design and carry out research independently or in groups to provide alternative solutions to problems in the field of educational technology, by promoting digital literacy				
	CPL-KU6	Able to produce outcomes in the form of high performance and commitment as a Learning Technology Developer, Education and Training Analyst, and Multimedia/Animation/Broadcast Teacher				
	Course Learning Outcomes (CPMK)					
	CPMK-S8	Have a scientific, critical and innovative attitude in scientific and responsible learning of educational technology				
CPMK-P2	Able to master the application of concepts, theories, types to the principles of interactive multimedia, and be able to implement their application.					

	CPMK-KK4	Able to design and create interactive multimedia-based learning media to overcome problems in the world of education										
	CPMK-KU6	Able to produce appropriate and effective interactive multimedia programs as learning resources and learning support media.										
	The final ability of each learning stage (Sub-CPMK)											
	Sub-CPMK1	Students are able to understand the concept of Interactive Multimedia (MMI)										
	Sub-CPMK2	Students are able to understand the theory that underlies the development of Interactive Multimedia (MMI)										
	Sub-CPMK3	Students are able to understand the principles that underlie the development of Interactive Multimedia (MMI)										
	Sub-CPMK4	Students are able to distinguish the types of Interactive Multimedia										
	Sub-CPMK5	Students are able to understand the components of Interactive Multimedia (MMI)										
	Sub-CPMK6	Students are able to understand the model and procedures for developing Interactive Multimedia (MMI)										
	Sub-CPMK7	Students are able to operate <i>Construct 2</i> to support the development of the Interactive Multimedia (MMI) program										
	Sub-CPMK8	Students develop Interactive Multimedia (MMI) programs according to design procedures										
	Sub-CPMK9	Students are able to evaluate the Interactive Multimedia (MMI) program according to the criteria of good Interactive Multimedia										
	Sub-CPMK10	Students are able to develop Interactive Multimedia (MMI) programs independently										
	Correlation between CPL/CPMK and Sub-CPMK											
		Sub-CPM K1	Sub-CPM K2	Sub-CPM K3	Sub-CPM K4	Sub-CPM K5	Sub-CPM K6	Sub-CPM K7	Sub-CPM K8	Sub-CPM K9	Sub-CPM K10	
	CPMK-S7											
	CPMK-P1											
	CPMK-KK3											
	CPMK-KU5											
Brief Description MK	This course aims to provide conceptual understanding and practical experience on interactive multimedia development. Based on these objectives, this course presents conceptual theories about: 1) interactive multimedia, 2) the principles that underlie the development of interactive multimedia (MMI), 3) types of interactive multimedia, 4) interactive multimedia development methods, 5) development procedures Interactive Multimedia, 6) Software Construct 2.											
Study Material: Theory Learning	<ol style="list-style-type: none"> 1. Understanding interactive multimedia 2. Characteristics of interactive multimedia 3. Use of interactive multimedia 4. The development of interactive multimedia in education 											

5. The role of behavioristic learning theory in the development of interactive multimedia programs
6. The role of cognitive learning theory in the development of interactive multimedia programs
7. The role of constructivist learning theory in underpinning the development of interactive multimedia programs
8. Multimedia principles, proximity of space, time, coherence, modality, redundancy, and individual differences
9. Multimedia types *tutorials, drills, simulation, and educational games*
10. Multimedia components: text, graphics, audio, video and animation
11. Borg & Gall development model
12. Allesi & Trollip development model
13. Lee & Owens development model
14. Get to know *workspace* and menu functions in the program *Construct 2*
15. Operate basic animation techniques using the program *Construct 2*
16. GBIM (Outline of Content)
17. *Flow chart* interactive multimedia program
18. *Storyboard* interactive multimedia program
19. Criteria for interactive multimedia programs and the aspects assessed in the evaluation of interactive multimedia programs
20. Interactive multimedia development procedure

References

Main :	
	<ol style="list-style-type: none"> 1. Munir. 2013. <i>Learning multimedia</i>. Bandung: Alphabeta 2. Roedavan, Rickman. 2017. <i>Construct 2 Game Engine Tutorial</i>. Bandung: Informatics
Supporters:	
	<ol style="list-style-type: none"> 1. Mayer, Richard E. 2009. <i>Multimedia Learning Principles and Applications (Teguh Wahyu Utomo Translation)</i>. New York: Cambridge University Press. (Original book published 2001) 2. Reddi, Usha V. & Sanjaya Mishra. (Eds). 2003. <i>Educational Multimedia a Handbook for Teacher-Developers</i>. New Delhi: Commonwealth Educational Media Center of Asia (CEMCA) 3. Allesi, Stephen M. & Stanley R. Trollip. 2001. <i>Multimedia for Learning : Methods and Development (Third Edition)</i>. Boston: Allyn and Bacon 4. Winarno, et al. 2009. <i>Learning Multimedia Evaluation Techniques</i>. Yogyakarta: Genius Prima Media 5. Ivers, Karen S. & Ann E. Barron. 2002. <i>Multimedia Project in Education : Designing, Producing, and Assessing</i>. USA: Libraries Unlimited 6. Winata, Dawn. 2013. <i>Interactive Media Design</i>. Bandung: Yudhistira

7. Kustandi, Cecep. & Darmawan, Daddy. 2021. *Learning Media Development: Media Development Concepts & Applications*. Bandung: Prenadamedia Group

Supporting lecturer

Requirements course 1. Learning Media

Mg To-	The ultimate ability of each learning stages (Sub-CPMK)	Evaluation		Learning Forms, Learning methods, Student Assignment, [Estimated time]		Theory Learning [References]	Weight Evaluation (%)
		Indicator	Criteria & Form	Learning Offline (<i>offline</i>)	Learning online (<i>on line</i>)		
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
1.	Students are able to understand the concept of Interactive Multimedia (MMI)	1. Students are able understand the meaning interactive multimedia 2. Students are able understand the characteristics interactive multimedia 3. Students are able understand the use interactive multimedia 4. Students are able understand development deep multimedia education	writing test and verbal	1. Presentation 2. Discussion 3. Recitation	1. Synchronous 2. Asynchronous	Attached	4%
2.	Students are able to understand the underlying theory interactive multimedia development (MMI)	1. Students are able understand the role of theory learning behavioristic in underlying program development interactive multimedia	writing test and verbal	1. Learning cooperative 2. Presentation 3. Discussion 4. Recitation	1. Synchronous 2. Asynchronous	Attached	4%

		<p>2. Students are able understand the role of theory cognitive learning in underpinning development multimedia program interactive</p> <p>3. Students are able understand the role of theory constructivist learning in the underlying program development interactive multimedia</p>					
3.	Students are able to understand the principles that underlie the development of Interactive Multimedia (MMI)	<p>1. Students are able understand the principle multimedia</p> <p>2. Students are able understand the principle of space</p> <p>3. Students are able understand the principle of time</p> <p>4. Students are able understand the principle coherence</p> <p>5. Students are able understand the principle modality</p> <p>6. Students are able understand the principle redundancy</p>	writing test and verbal	<p>1. Learning cooperative</p> <p>2. Presentation</p> <p>3. Discussion</p> <p>4. Recitation</p>	<p>1. Synchronous</p> <p>2. Asynchronous</p>	Attached	4%

		7. Students are able understand the principle individual differences					
4.	Students are able distinguish the types Interactive Multimedia	<p>1. Students are able understand the type multimedia <i>tutorials</i></p> <p>2. Students are able understand the type multimedia <i>drills</i></p> <p>3. Students are able understand the type multimedia <i>simulation</i></p> <p>4. Students are able understand the type multimedia <i>educational games</i></p>	writing test and verbal	<p>1. Learning cooperative</p> <p>2. Presentation</p> <p>3. Discussion</p> <p>4. Recitation</p>	<p>1. Synchronous</p> <p>2. Asynchronous</p>	Attached	4%
5.	Students are able to understand the components Interactive Multimedia (MMI)	<p>1. Students are able understand the components multimedia: text</p> <p>2. Students are able understand the components multimedia: graphics</p> <p>3. Students are able understand the components multimedia: audio</p> <p>4. Students are able understand the components multimedia: video</p>	writing test and verbal	<p>1. Discussion group</p> <p>2. Presentation</p> <p>3. Discussion</p> <p>4. Recitation</p>	<p>1. Synchronous</p> <p>2. Asynchronous</p>	Attached	4%

		5. Students are able understand the components multimedia: animation					
6.	Students are able to understand models and procedures interactive multimedia development (MMI)	1. Students are able understand the model Borg development & Gall 2. Students are able understand the model Allesi development & Trolls 3. Students are able understand the model Lee development & Owens	writing test and Observation	1. Presentation 2. Discussion	1. Synchronous 2. Asynchronous	Attached	5%
7.	Mid-Semester Evaluation (ETS)						
8.	Students are able operate <i>Construct 2</i> to support program development Interactive Multimedia (MMI)	1. Students are able understand <i>workspace</i> and menu functions in the program <i>Construct 2</i> 2. Students are able operate technique basic animation techniques using the program <i>Construct 2</i>	Project media	1. Discussion 2. Tutorials 3. Project	1. Synchronous 2. Asynchronous	Attached	8%
9.	Students do program development Interactive Multimedia (MMI)	1. Students are able create GBIM (Line	Project media	1. Learning cooperative 2. Discussion	1. Synchronous 2. Asynchronous	Attached	15%

	in accordance with the procedure planning	Material Content) multimedia program 2. Students are able make <i>flow chart</i> multimedia program 3. Students are able make <i>storyboard</i> multimedia program		3. Project			
10.	Students do program development Interactive Multimedia (MMI) according to the procedure planning	1. Students are able make <i>introduction of the program</i> 2. Students are able make menu display main	Project media	1. Discussion 2. Tutorials 3. Independent 4. Project	1. Synchronous 2. Asynchronous	Attached	15%
11.	Students do program development Interactive Multimedia (MMI) according to the procedure planning	1. Students are able compose content (material, images, audio, video) which will be presented in a multimedia program interactive 2. Students are able make an evaluation (quiz or test) in an interactive multimedia program 3. Students are able make <i>program ending</i> (cover) multimedia interactive	Project media	1. Discussion 2. Tutorials 3. Independent 4. Project	1. Synchronous 2. Asynchronous	Attached	15%
12.	Students are able evaluate the program Interactive Multimedia (MMI) according to the criteria	1. Students are able understand the criteria multimedia program good interactive	writing test and verbal	1. Learning cooperative 2. Discussion 3. Project	1. Synchronous 2. Asynchronous	Attached	12%

	Good InteractiveMultimedia	2. Students are able understand the aspects thatassessed in evaluation multimedia program interactive					
13.	Students are able develop program Interactive Multimedia (MMI) independently	1. Students are able understand the procedure development interactive multimedia	writing test and verbal	1. Discussion 2. Project	1. Synchronous 2. Asynchronous	Attached	10%
14.	End of Semester Evaluation (EAS)						

Notes :

1. **Learning Outcomes of Graduates of Study Program (CPL-PRODI)** is the ability possessed by every graduate of the study program which is the internalization of attitudes, mastery of knowledge and skills in accordance with the level of study program obtained through the learning process.
2. **CPL charged to the course** are some of the learning outcomes of study program graduates (CPL-PRODI) which are used for the formation/development of a course consisting of aspects of attitude, general skills, special skills and knowledge.
3. **CP Course (CPMK)** is the ability that is described specifically from the CPL that is charged to the course, and is specific to the study material or learning material for the course.
4. **Sub-CP Course (Sub-CPMK)** is the ability that is described specifically from the CPMK that can be measured or observed and is the final ability that is planned at each stage of learning, and is specific to the learning material of the course.
5. **Rating indicators** ability in the process and student learning outcomes is a specific and measurable statement that identifies the ability or performance of student learning outcomes accompanied by evidence.
6. **Rating Criteria** is a benchmark used as a measure or benchmark for learning achievement in an assessment based on predetermined indicators. Assessment criteria are guidelines for raters so that the assessment is consistent and unbiased. Criteria can be either quantitative or qualitative.
7. **Assessment technique:** test and non-test.
8. **Learning form:** 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 the study material that can be presented in the form of several main points and sub-topics.
11. **Rating weight** is the percentage of assessment of each achievement of the sub-CPMK which is proportional to the level of difficulty of achieving the sub-CPMK, and the total is 100%.
12. **PB**= Learning Process, **PT**=Structured Assignments, **KM**= Independent Activities.

Portfolio of Student CPL Achievement Assessment & Evaluation

Mg	CPL	CPMK (CLO)	Sub-CPMK (LLO)	Indicator	Question Form - Weight(%)*	Weight (%) Sub-CPMK	Mhs value (0-100)	--((Mhs Value) X (Weight%)*)	Achievement CPL at MK (%)
1	CPL-P	CPM-K	Sub CPMK 1	<p>1. Students are able understand definition interactive multimedia</p> <p>2. Students are able understand characteristics interactive multimedia</p> <p>3. Students are able understand utilization interactive multimedia</p> <p>4. Students are able understand development deep multimedia education</p>	<p>Task 1</p> <p>1. Explain definition multimedia interactive according to understanding you!</p> <p>2. Mention and tell characteristics multimedia interactive!</p> <p>3. Mention utilization of multimedia interactive for world education!</p>	4%	4%		
2	CPL-P	CPM-K	Sub CPMK 2	<p>1. Students are able understand the role learning theory behavioristic in underlying development multimedia program interactive</p> <p>2. Students are able understand the role cognitive learning theory in underlying development</p>	<p>Task 2</p> <p>1. Explain the role learning theory behavioristic, cognitive, and constructivist to development program multimedia interactive!</p>	4%	4%		

				<p>multimedia program interactive</p> <p>3. Students are able understand the role learning theory constructivist in underlying development multimedia program interactive</p>						
3	CPL-P	CPM-K	Sub CPMK 3	<p>1. Students are able understand the principle multimedia</p> <p>2. Students are able understand the principle room</p> <p>3. Students are able understand the principle time</p> <p>4. Students are able understand the principle coherence</p> <p>5. Students are able understand the principle modality</p> <p>6. Students are able understand the principle redundancy</p> <p>7. Students are able understand the principle individual differences</p>	<p>Task 3</p> <p>1. Explain what you know about principles multimedia interactive below this:</p> <p>a. Multimedia b. Room c. Time d. Coherence e. Modality f. Redundancy g. Difference individual</p>	4%	4%			
4	CPL-P	CPM-K	Sub CPMK 4	<p>1. Students are able understand the type multimediatutorials</p>	<p>Task 4</p> <p>1. Explain difference from multimedia type</p>	4%	4%			

				<p>2. Students are able understand the type <i>multimedadrills</i></p> <p>3. Students are able understand the type <i>multimedia simulation</i></p> <p>4. Students are able understand the type <i>multimedia educational games</i></p>	<p><i>tutorials, drills, simulations, and educational games, as well as give an example each each kind!</i></p>					
5	CPL-P	CPM-K	Sub CPMK 5	<p>1. Students are able understand component multimedia: text</p> <p>2. Students are able understand the components multimedia: graphics</p> <p>3. Students are able understand the components multimedia: audio</p> <p>4. Students are able understand the components multimedia: video</p> <p>5. Students are able understand the components multimedia: animation</p>	<p>Task 5</p> <p>1. Explain clearly short variety component multimedia along with for example!</p>	4%	4%			
6	CPL-P	CPM-K	Sub CPMK 6	<p>1. Students are able understand the model Borg pengembangan development & Gall</p> <p>2. Students are able understand the model Allesi's development & Trolls</p>	<p>Task 6</p> <p>1. Identify difference from model development Borg & Gall, Allesi & Trollip, and Lee & Owens!</p>	5%	5%			

				3. Students are able understand the model Lee development & Owens						
7	Mid-Semester Evaluation (ETS)									
8	CPL-P	CPM-K	Sub CPMK 7	1. Students are able understand <i>workspace</i> and menu functions what's in program <i>Construct 2</i> 2. Students are able operate techniques basic animation use program <i>Construct 2</i>	Project Task Make multimedia interactive simple, composed of 6 layers	8%	8%			
9	CPL-P	CPM-K	Sub CPMK 8	1. Students are able make GBIM (Outline of Contents Material) program multimedia 2. Students are able make <i>flow chart</i> multimedia program 3. Students are able make <i>stroyboard</i> multimedia program	Project Task 1. Looking for RPP level education free, eyes free lessons 2. Create GBIM from the RPP that has been selected 3. Make <i>flow chart</i> 4. Make <i>stroyboard</i>	15%	15%			
10	CPL-P	CPM-K	Sub CPMK 8	1. Students are able make <i>introduce of the program</i> 2. Students are able make display main course	Project tasks designing multimedia interactive based on RPP selected, as well as GBIM, <i>flow chart</i> , and	15%	15%			

					<p><i>storyboard</i> which already made!</p> <p>(Project target until <i>introduce of the program</i> and menu display main)</p>					
11	CPL-P	CPM-K	Sub CPMK 8	<ol style="list-style-type: none"> 1. Students are able compose content (materials, pictures, audio, video) that will be presented in multimedia program interactive 2. Students are able make an evaluation (quiz or test) in a multimedia program interactive 3. Students are able make <i>ending program</i> (Closing) interactive multimedia 	<p>Project tasks designing multimedia interactive based on RPP selected, as well as GBIM, <i>flow chart</i>, and <i>storyboard</i> which already made!</p> <p>(Project target until compose content, evaluation, and <i>ending</i>)</p>	15%	15%			
12	CPL-P	CPM-K	Sub CPMK 9	<ol style="list-style-type: none"> 1. Students are able understand the criteria multimedia program good interactive 2. Students are able understand aspects rated in program evaluation interactive multimedia 	<p>Project tasks</p> <ol style="list-style-type: none"> 1. Looking for criteria evaluation multimedia interactive! 2. Do evaluation of multimedia interactive based on the criteria that found (Performed by media expert and also myself) 	12%	12%			

13	CPL-P	CPM-K	Sub CPMK 10	1. Students are able understand the procedure development interactive multimedia	Project tasks 1. Arrange procedure development from result evaluation multimedia the interactive already made!	10%	10%			
14	End of Semester Evaluation (EAS)									
Total weight (%)						100	100			
Student's final grade (-(Score) X (Weight%))										

Notes : CLO = Courses Learning Outcomes, LLC = Lesson Learning Outcomes