	Universitas Negeri Surabaya Faculty of Education, Educational Technology Undergraduate Study Program	Document Code

SEMESTER LEARNING PLAN

Courses	CODE	Course Family	Credit Weight			SEMESTER	Compilation Date
Interactive Multimedia Development	8620304090	Compulsory Study Program Subjects	T=4	P=0	ECTS=6.36	4	May 5, 2022

AUTHORIZATION	SP Developer	Course Cluster Coordinator	Study Program Coordinator
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Learning model: Project Based Learning

Program Learning Outcomes (PLO)

PLO study program which is charged to the course

PLO-5	Able to master the theoretical concepts of design, development, utilization, management and evaluation in the fields of curriculum and educational technology
PLO-6	Able to design, implement, evaluate learning in visual communication design, animation, broadcasting and informatics
PLO-8	Able to apply scientific methods and reflective thinking to solve problems and make decisions in the field of educational technology

Program Objectives (PO)

PO - 1	Able to show an innovative attitude in learning by analyzing the basic concepts of interactive multimedia and its role in digital communication
PO - 2	Students are able to select and apply appropriate development models in creating interactive multimedia projects.
PO - 3	Designing learning resources independently provides alternative solutions to problems in the field of Educational Technology by planning, designing and developing interactive videos
PO - 4	Students can plan, design and develop interactive multimedia

PLO-PO Matrix

P.O	PLO-5	PLO-6	PLO-8
PO-1			
PO-2			
PO-3			
PO-4			

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																
PO-3																
PO-4																

Short Course Description: The Interactive Multimedia Development course is designed to provide in-depth understanding and skills in interactive multimedia development. This course carries project-based learning, where students will learn through practical experience in developing various types of interactive learning media, including interactive videos and interactive multimedia

References

Main :

1. Asrumiati. 2013. Adobe Flash CS6 . Yogyakarta: Andi Wahana Komputer
2. Mariono, Andi, dkk. 2020. Handout Pengembangan Multimedia Interaktif . Surabaya: Teknologi Pendidikan FIP Unesa
3. Munir, 2013. Multimedia dan Konsep Aplikasi Dalam Pendidikan . Bandung: Penerbit Alfabeta
4. Nazruddin Safaat H. 2012. Pemograman Aplikasi Mobile Smartphone dan Tablet PC berbasis Android . Semarang: Andi
5. Pranowo, G. 2011. Kreasi Animasi Interaktif dengan Action Script 3.0 pada Flash CS5 . Yogyakarta: Andi.
6. Purnama, B.E. 2013. Konsep Dasar Multimedia. Yogyakarta: Graha Ilmu
7. Roedavan, Rickman. 2017. Construct 2 Tutorial Game Engine. Bandung: Informatika

Supporters:

1. Mayer, Richard E. 2009. Multimedia Learning Prinsip-Prinsip dan Aplikasi (Terjemahan Teguh Wahyu Utomo). New York: Cambrige University Press. (Buku asli diterbitkan tahun 2001)
2. Reddi, Usha V. & Sanjaya Mishra. (Eds). 2003. Educational Multimedia a Handbook for Teacher-Developers. New Delhi: Commonwealth Educational Media Center of Asia (CEMCA)
3. Allesi, Stephen M. & Stanley R. Trollip. 2001. Multimedia for Learning : Methods and Development (Third Edition). Boston: Allyn and Bacon
4. Winarno, dkk. 2009. Teknik Evaluasi Multimedia Pembelajaran. Yogyakarta: Genius Prima Media
5. Ivers, Karen S. & Ann E. Barron. 2002. Multimedia Project in Education : Designing, Producing, and Assesing. USA: Libraries Unlimited
6. Winata, Fajar. 2013. Desain Media Interaktif. Bandung: Yudhistira
7. Kustandi, Cecep. & Darmawan, Daddy. 2021. Pengembangan Media Pembelajaran: Konsep & Aplikasi Pengembangan Media. Bandung: Prenadamedia Group

Supporting lecturer	Dr. H. Andi Mariono, M.Pd. Dr. Alim Sumarno, M.Pd. Hirnanda Dimas Pradana, M.Pd.

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 can explain the basic concepts of interactive multimedia and its role in digital communication.	1. Students are able to explain the basic concepts of interactive multimedia and its role in digital communication clearly and accurately 2. Students are able to identify and detail the definition of interactive multimedia correctly. 3. Students are able to describe exactly how interactive multimedia contributes to the context of digital communication.	**Criteria:** A = 86 - 100 (3.8 - 4.00) A- = 80 - 85 (3.7 - 3.79) B = 75 - 79 (3.6 - 3.69) B = 70 - 74 (3 .5 - 3.59) B- = 65 - 69 (3.4 - 3.49) C = 50 – 64 (3.00 – 3.39) D = 25 – 50 (2.00 – 2.99) E = < 25 (0 – 1.99) **Form of Assessment** : Participatory Activities	In class, students are invited to discussion and question and answer sessions about the basic concepts of interactive multimedia. In small groups, students work on case studies involving interactive multimedia and presentations of group discussion results. 2 X 50	Students are given access to learning materials about interactive multimedia through the e-learning platform. Students read the learning material that has been provided independently. Students participate in online discussions through discussion forums or online groups to share initial understanding of interactive multimedia. 2x50	**Material:** Interactive Multimedia (MMI) concept **References:** *Kustandi, Cecep. & Darmawan, Daddy. 2021. Learning Media Development: Media Development Concepts & Applications. Bandung: Prenadamedia Group*	3%
2	Students are able to select and apply appropriate development models in creating interactive multimedia projects.	1. Students are able to accurately explain various interactive multimedia development models. 2. Students are able to identify the most appropriate development model for a particular multimedia project. 3. Students are able to contribute to group discussions and presentations of development models.	**Criteria:** A = 86 - 100 (3.8 - 4.00) A- = 80 - 85 (3.7 - 3.79) B = 75 - 79 (3.6 - 3.69) B = 70 - 74 (3 .5 - 3.59) B- = 65 - 69 (3.4 - 3.49) C = 50 – 64 (3.00 – 3.39) D = 25 – 50 (2.00 – 2.99) E = < 25 (0 – 1.99) **Form of Assessment** : Participatory Activities, Practice/Performance	In class, students are invited to group discussion sessions about various interactive multimedia development models. In small groups, students present the development models they have learned to their peers. Group discussions will focus on applying the development model in the context of an upcoming interactive multimedia project. 2 X 50	Students are given access to learning materials about various interactive multimedia development models through e-learning platforms. Students read and study the material independently. Students participate in online discussions through discussion forums or information sharing platforms to share their understanding of various development models. 2 x 50	**Material:** development of Interactive Multimedia (MMI) **Library:** *Winata, Fajar. 2013. Interactive Media Design. Bandung: Yudhistira*	3%

3	Students can plan, design and develop interactive videos	1. Students are able to plan interactive video projects with the right steps. 2. Students are able to explain the principles of planning interactive video projects clearly. 3. Students are able to present project plans effectively.	**Criteria:** A = 86 - 100 (3.8 - 4.00) A- = 80 - 85 (3.7 - 3.79) B = 75 - 79 (3.6 - 3.69) B = 70 - 74 (3 .5 - 3.59) B- = 65 - 69 (3.4 - 3.49) C = 50 – 64 (3.00 – 3.39) D = 25 – 50 (2.00 – 2.99) E = < 25 (0 – 1.99) **Form of Assessment** : Project Results Assessment / Product Assessment	In class, students work on interactive video project planning exercises in small groups. Students present their project plans in front of the class. 2 X 50	Students are given access to learning materials about interactive video and how to plan interactive video projects. Students read the learning material independently. Students participated in an online discussion to discuss the principles of planning a 2 x 50 interactive video project	**Material:** development of Interactive Multimedia (MMI) **References:** *Ivers, Karen S. & Ann E. Barron. 2002. Multimedia Projects in Education: Designing, Producing, and Assessing. USA: Libraries Unlimited*	3%
4	Students are able to plan and design interactive videos	1. Students are able to plan interactive video projects 2. Students are able to design an interactive video project concept that is appropriate to the learning concept that will be delivered 3. Students are able to integrate relevant interactive elements in their project plans. 4. Students are able to explain and present project plans clearly and effectively.	**Criteria:** A = 86 - 100 (3.8 - 4.00) A- = 80 - 85 (3.7 - 3.79) B = 75 - 79 (3.6 - 3.69) B = 70 - 74 (3 .5 - 3.59) B- = 65 - 69 (3.4 - 3.49) C = 50 – 64 (3.00 – 3.39) D = 25 – 50 (2.00 – 2.99) E = < 25 (0 – 1.99) **Form of Assessment** : Participatory Activities, Practice/Performance	In class, students are divided into small groups. Each group will discuss their initial ideas for an interactive video project. Each student presents their plans for an interactive video. This involves explaining the concept, planned interactivity, and use of the application in their project. 2 X 50	Students are given access to learning materials about interactive videos and how to plan and design interactive videos using e-learning platforms. Students are given several forms of interactive videos that have been made, and they will be asked to analyze them. 2 X 50	**Material:** types of Interactive Multimedia **Reference:** *Winarno, et al. 2009. Multimedia Learning Evaluation Techniques. Yogyakarta: Genius Prima Media*	3%
5	Students can develop interactive videos	1. Students are able to develop interactive videos according to the instructions. 2. Students are able to analyze and apply the interactive features provided. 3. Students are able to explain the development steps they take in the practicum session.	**Criteria:** A = 86 - 100 (3.8 - 4.00) A- = 80 - 85 (3.7 - 3.79) B = 75 - 79 (3.6 - 3.69) B = 70 - 74 (3 .5 - 3.59) B- = 65 - 69 (3.4 - 3.49) C = 50 – 64 (3.00 – 3.39) D = 25 – 50 (2.00 – 2.99) E = < 25 (0 – 1.99) **Form of Assessment** : Practice / Performance	Students participate in practical sessions in class. They will use the app to develop simple interactive videos according to the instructions provided. Students present the results of their development, and there will be a discussion about the solutions they found and questions that may have arisen during the development process. 2 X 50	Students are given access to learning materials on interactive video development via an e-learning platform. Students saw several forms of interactive video development and practical demonstrations of how to use them. 2 X 50	**Material:** components of Interactive Multimedia (MMI) **References:** *Reddi, Usha V. & Sanjaya Mishra. (Eds). 2003. Educational Multimedia a Handbook for Teacher-Developers. New Delhi: Commonwealth Educational Media Center of Asia (CEMCA)*	4%
6	Students can develop interactive videos	1. Students are able to develop interactive videos with H5P according to the instructions. 2. Students are able to analyze and apply the interactive features provided by H5P. 3. Students are able to explain the development steps they take in the practicum session.	**Criteria:** A = 86 - 100 (3.8 - 4.00) A- = 80 - 85 (3.7 - 3.79) B = 75 - 79 (3.6 - 3.69) B = 70 - 74 (3 .5 - 3.59) B- = 65 - 69 (3.4 - 3.49) C = 50 – 64 (3.00 – 3.39) D = 25 – 50 (2.00 – 2.99) E = < 25 (0 – 1.99) **Form of Assessment** : Practice / Performance	Students continue practical sessions in class to develop more complex interactive videos with H5P, including the use of advanced features such as branching and media integration. Students present the results of their development, explain the use of advanced features, and provide reasoning behind the design decisions they make. 2 X 50	Students are given access to learning materials on developing interactive videos with H5P, especially the advanced sections that cover more complex features. Students saw more complex forms of interactive video and demonstrations of the use of H5P's advanced features. 2 X 50	**Material:** components of Interactive Multimedia (MMI) **References:** *Reddi, Usha V. & Sanjaya Mishra. (Eds). 2003. Educational Multimedia a Handbook for Teacher-Developers. New Delhi: Commonwealth Educational Media Center of Asia (CEMCA)*	4%

7	Students are able to test and solve problems in interactive videos	1. Students are able to test interactive videos and identify problems. 2. Students are able to solve problems that arise in interactive videos. 3. Students are able to explain the testing steps and the solutions they recommend.	**Criteria:** A = 86 - 100 (3.8 - 4.00) A- = 80 - 85 (3.7 - 3.79) B = 75 - 79 (3.6 - 3.69) B = 70 - 74 (3 .5 - 3.59) B- = 65 - 69 (3.4 - 3.49) C = 50 – 64 (3.00 – 3.39) D = 25 – 50 (2.00 – 2.99) E = < 25 (0 – 1.99) **Form of Assessment** : Practice / Performance	Students conduct practical sessions in class where they will test interactive videos they have previously developed with the help of the H5P testing tool. Students present their test results, identify problems that arise, and provide solutions or recommendations to overcome these problems. 2 X 50	Students are given access to learning materials about interactive video testing with H5P. It covers testing concepts, available testing tools, and steps to take in testing interactive videos. Students participate in online discussions about best practices in interactive video testing and how to address issues that may arise. 2 X 50	**Material:** Interactive Multimedia (MMI) program **Reference:** *Purnama, BE 2013. Basic Multimedia Concepts. Yogyakarta: Graha Ilmu*	4%
8	UTS	1. Students are able to explain the concept of interactive multimedia. 2. Students are able to analyze interactive multimedia development models. 3. Students are able to plan, develop, and test interactive videos with H5P.	**Criteria:** A = 86 - 100 (3.8 - 4.00) A- = 80 - 85 (3.7 - 3.79) B = 75 - 79 (3.6 - 3.69) B = 70 - 74 (3 .5 - 3.59) B- = 65 - 69 (3.4 - 3.49) C = 50 – 64 (3.00 – 3.39) D = 25 – 50 (2.00 – 2.99) E = < 25 (0 – 1.99) **Form of Assessment** : Project Results Assessment / Product Assessment	Students take exams that cover material that has been taught in previous meetings, including interactive multimedia concepts, development models, and interactive video development with H5P. 4 X 50	- -	**Material:** Interactive Multimedia (MMI) development procedures **References:** *Mariono, Andi, et al. 2020. Interactive Multimedia Development Handout. Surabaya: Unesa FIP Educational Technology*	25%
9	Students are able to plan and design interactive multimedia	1. Students are able to plan interactive multimedia projects 2. Students are able to explain the concepts and features that will be used in their projects.	**Criteria:** A = 86 - 100 (3.8 - 4.00) A- = 80 - 85 (3.7 - 3.79) B = 75 - 79 (3.6 - 3.69) B = 70 - 74 (3 .5 - 3.59) B- = 65 - 69 (3.4 - 3.49) C = 50 – 64 (3.00 – 3.39) D = 25 – 50 (2.00 – 2.99) E = < 25 (0 – 1.99) **Form of Assessment** : Practice / Performance	Students have a practical session in class where they will plan their first interactive multimedia project with Construct 2. They will decide on the theme, purpose, plot, and interactive features that will be included in this project. Students present their project plans to the class, explain the important elements, and provide reasoning behind the design decisions they make. 2 X 50	Students are given access to learning materials about interactive multimedia development with Construct 2 via the e-learning platform. Students see interactive multimedia forms with Construct 2 and practical demonstrations of how to plan and design projects using this software. 2 X 50	**Material:** Interactive Multimedia (MMI) program in accordance with design procedures. **Reference:** *Pranowo, G. 2011. Interactive Animation Creation with Action Script 3.0 on Flash CS5. Yogyakarta: Andi.*	4%
10	Students can develop interactive multimedia	1. Identify 2 construct tools that are commonly used to design multimedia. 2. Identify the steps in designing symmetrical shapes 3. Operate construct 2 to design a simple design composition.	**Criteria:** A = 86 - 100 (3.8 - 4.00) A- = 80 - 85 (3.7 - 3.79) B = 75 - 79 (3.6 - 3.69) B = 70 - 74 (3 .5 - 3.59) B- = 65 - 69 (3.4 - 3.49) C = 50 – 64 (3.00 – 3.39) D = 25 – 50 (2.00 – 2.99) E = < 25 (0 – 1.99) **Form of Assessment** : Practice / Performance	Students conduct a practical session in class where they will begin developing their first interactive multimedia with Construct 2. They will begin the project by designing several interactive elements. Students present their initial development results to the class, explaining the concept, initial features, and progress of their project. 2 X 50	Students are given access to learning materials about interactive multimedia development with Construct 2. Students see interactive multimedia development with Construct 2, as well as practical demonstrations of the use of this software. 2 X 50	**Material:** Interactive Multimedia (MMI) program in accordance with design procedures. **Reference:** *Nazruddin Safaat H. 2012. Programming Android-based Mobile Smartphone and Tablet PC Applications. Semarang: Andi*	4%

11	Students can develop interactive multimedia	1. Students are able to develop interactive multimedia with Construct 2. 2. Students were able to explain additional features and progress of their project. 3. Students are able to apply concepts and understanding from learning material into project development.	**Criteria:** A = 86 - 100 (3.8 - 4.00) A- = 80 - 85 (3.7 - 3.79) B = 75 - 79 (3.6 - 3.69) B = 70 - 74 (3 .5 - 3.59) B- = 65 - 69 (3.4 - 3.49) C = 50 – 64 (3.00 – 3.39) D = 25 – 50 (2.00 – 2.99) E = < 25 (0 – 1.99) **Form of Assessment** : Practice / Performance	Students continue development of their interactive multimedia projects with Construct 2. They will develop more interactive features and continue project development. Students present their development results to the class, explaining the additional features they have added and the progress of their projects. 2 X 50	Students are given access to learning materials about interactive multimedia development with Construct 2 (Part 2) via the e-learning platform. Students will see interactive multimedia development products with Construct 2 (Part 2) and practical demonstrations of the use of this software. 2 X 50	**Material:** Interactive Multimedia (MMI) in accordance with design procedures. **Reference:** *Nazruddin Safaat H. 2012. Programming Android-based Mobile Smartphone and Tablet PC Applications. Semarang: Andi*	3%
12	Students can develop interactive multimedia	1. Students are able to develop interactive multimedia with Construct 2. 2. Students were able to explain additional features and progress of their project. 3. Students are able to apply concepts and understanding from learning material into project development.	**Criteria:** A = 86 - 100 (3.8 - 4.00) A- = 80 - 85 (3.7 - 3.79) B = 75 - 79 (3.6 - 3.69) B = 70 - 74 (3 .5 - 3.59) B- = 65 - 69 (3.4 - 3.49) C = 50 – 64 (3.00 – 3.39) D = 25 – 50 (2.00 – 2.99) E = < 25 (0 – 1.99) **Form of Assessment** : Practice / Performance	Students continue development of their interactive multimedia projects with Construct 2. They will develop more interactive features and continue project development. Students present their development results to the class, explaining the additional features they have added and the progress of their projects. 2 X 50	Students are given access to learning materials about interactive multimedia development with Construct 2 (Part 3) via the e-learning platform. Students will see interactive multimedia development products with Construct 2 (Part 3) and practical demonstrations of the use of this software. 2 X 50	**Material:** Interactive Multimedia (MMI) in accordance with design procedures. **Reference:** *Nazruddin Safaat H. 2012. Programming Android-based Mobile Smartphone and Tablet PC Applications. Semarang: Andi*	3%
13	Students can develop additional features that increase interactivity in multimedia projects	1. Students are able to develop additional features that are relevant and useful. 2. Students are able to explain the concept and benefits of the additional features they have developed. 3. Students are able to integrate additional features well into multimedia projects.	**Criteria:** A = 86 - 100 (3.8 - 4.00) A- = 80 - 85 (3.7 - 3.79) B = 75 - 79 (3.6 - 3.69) B = 70 - 74 (3 .5 - 3.59) B- = 65 - 69 (3.4 - 3.49) C = 50 – 64 (3.00 – 3.39) D = 25 – 50 (2.00 – 2.99) E = < 25 (0 – 1.99) **Form of Assessment** : Participatory Activities, Practice/Performance	Students take part in an in-class practicum session where they will develop additional features to the Construct 2 multimedia project. These features may include new interactive elements or improvements to existing features. Students present the results of developing additional features to the class, explaining the concept, benefits, and how to use them to increase the interactivity of their projects. 2 X 50	Students are given access to learning materials about developing additional features in the Construct 2 multimedia project via the e-learning platform. Students learn how additional features can increase interactivity in multimedia projects. 2 X 50	**Material:** Interactive Multimedia (MMI) in accordance with the criteria for good Interactive Multimedia **Reference:** *Munir, 2013. Multimedia and Application Concepts in Education. Bandung: Alphabeta Publishers*	4%
14	Students can present interactive multimedia projects	1. Students are able to explain the concept of interactive multimedia projects. 2. Students are able to explain the features they have added. 3. Students are able to deliver presentations clearly and effectively.	**Criteria:** A = 86 - 100 (3.8 - 4.00) A- = 80 - 85 (3.7 - 3.79) B = 75 - 79 (3.6 - 3.69) B = 70 - 74 (3 .5 - 3.59) B- = 65 - 69 (3.4 - 3.49) C = 50 – 64 (3.00 – 3.39) D = 25 – 50 (2.00 – 2.99) E = < 25 (0 – 1.99) **Form of Assessment** : Practice / Performance	Students present Part 1 of the interactive multimedia project they have developed. They will explain the concept of the project, the features they have added, and the progress they have made. After each presentation, students provide feedback to their peers based on established criteria. 2 X 50	Students are given access to learning materials on effective presentation techniques via an e-learning platform. Students will find examples of good presentations and case analysis of multimedia project presentations. 2 X 50	**Material:** Interactive Multimedia (MMI) in accordance with the criteria for good Interactive Multimedia **Reference:** *Purnama, BE 2013. Basic Concepts of Multimedia. Yogyakarta: Graha Ilmu*	4%

15	Students can present interactive multimedia projects	1. Students are able to explain the concept of interactive multimedia projects. 2. Students are able to explain the features they have added. 3. Students are able to deliver presentations clearly and effectively.	**Criteria:** A = 86 - 100 (3.8 - 4.00) A- = 80 - 85 (3.7 - 3.79) B = 75 - 79 (3.6 - 3.69) B = 70 - 74 (3 .5 - 3.59) B- = 65 - 69 (3.4 - 3.49) C = 50 – 64 (3.00 – 3.39) D = 25 – 50 (2.00 – 2.99) E = < 25 (0 – 1.99) **Form of Assessment** : Practice / Performance	Students present Part 1 of the interactive multimedia project they have developed. They will explain the concept of the project, the features they have added, and the progress they have made. After each presentation, students provide feedback to their peers based on established criteria. 2 X 50	Students are given access to learning materials on effective presentation techniques via an e-learning platform. Students will find examples of good presentations and case analysis of multimedia project presentations. 2 X 50	**Material:** Interactive Multimedia (MMI) in accordance with the criteria for good Interactive Multimedia **Reference:** *Purnama, BE 2013. Basic Concepts of Multimedia. Yogyakarta: Graha Ilmu*	4%
16	UAS	1. Students are able to explain the concept of interactive multimedia. 2. Students are able to apply development models in interactive multimedia projects. 3. Students are able to evaluate interactive multimedia projects with relevant criteria.	**Criteria:** A = 86 - 100 (3.8 - 4.00) A- = 80 - 85 (3.7 - 3.79) B = 75 - 79 (3.6 - 3.69) B = 70 - 74 (3 .5 - 3.59) B- = 65 - 69 (3.4 - 3.49) C = 50 – 64 (3.00 – 3.39) D = 25 – 50 (2.00 – 2.99) E = < 25 (0 – 1.99) **Form of Assessment** : Project Results Assessment / Product Assessment	Students take the UAS which covers various aspects of understanding interactive multimedia concepts, development models, and project evaluation that have been studied during this semester. 4 X 50		**Material:** Independent Interactive Multimedia Program (MMI) **References:** *Mariono, Andi, et al. 2020. Interactive Multimedia Development Handout. Surabaya: Unesa FIP Educational Technology*	25%

Evaluation Percentage Recap: Project Based Learning

No	Evaluation	Percentage
1.	Participatory Activities	8%
2.	Project Results Assessment / Product Assessment	53%
3.	Practice / Performance	39%
		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** ability in the process and student learning outcomes are specific and measurable statements that identify the ability 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.