	Universitas Negeri Surabaya **Faculty of Social Sciences and Law** **Geography Education Undergraduate Study Program**	**Document Code**

SEMESTER LEARNING PLAN

Courses	CODE	Course Family	Credit Weight			SEMESTER	Compilation Date
Basic Remote Sensing	8720202126	Compulsory Study Program Subjects	**T=2**	**P=0**	**ECTS=3.18**	3	July 17, 2024

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 that is charged to the course**	
	PLO-5	Able to make appropriate decisions to solve educational problems and transformative geography learning by utilizing various learning resources based on science and technology and the arts
	PLO-7	Able to make appropriate decisions to resolve regional problems in a spatial context based on an integrated geographic approach
	Program Objectives (PO)	
	PO - 1	Describe the meaning (position of remote sensing, limitations of remote sensing, basic concepts), basic principles, and procedures or systems as well as the physical basis of remote sensing
	PO - 2	Examining the concept of resolution in remote sensing and the spectral reflection patterns of various objects on the earth's surface
	PO - 3	Formulate, process, analyze data, and present geosphere information both physical and human aspects using geospatial technology for geographic learning and research
	PO - 4	Applying remote sensing science to study and analyze an object and/or phenomenon on the earth's surface in the context of resources and disasters based on geographic principles and approaches to support sustainable development
	PLO-PO Matrix	

P.O	PLO-5	PLO-7
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 Basic Remote Sensing course examines the basic concepts and principles of remote sensing, remote sensing procedures and systems, the basics of remote sensing physics, understanding the concept of resolution and spectral reflection curves of objects, recognizing photographic and non-photographic remote sensing images correctly through individual work and groups through elements of image interpretation and analysis using land cover/physiography/landscape-ecology approaches, as well as carrying out field activities in groups. Learning is carried out for 1 (one) semester using lecture methods, question and answer, discussions, quizzes, and individual and group assignments. Assessment is carried out through participatory activities, assignments, tests, performance/practice, group performance, portfolio, and project/product results.
References	**Main :**

1. Lillesand, T.M., Kiefer, R.W., and Chipman, J.W. (2015). Remote Sensing and Image Interpretation Seventh Edition. New York: John Willey and Sons.
2. Jensen, J.R. (2015). Introductory Digital Image Processing: A Remote Sensing Perspective. 4th Edition. USA: Pearson Education.
3. Jensen, J.R. (2014). Remote Sensing of the Environment: an Earth Resource Perspective. Second Edition. England: Pearson New International Edition.
4. Danoedoro, Projo. (2012). Pengantar Penginderaan Jauh Digital. Yogyakarta: ANDI Yogyakarta.
5. Congalton, R. G., & Green, K. (2009). Assessing the Accuracy of Remotely Sensed Data: Principle and Practice. Boca Raton: Taylor & Francis Group.
6. Sathyendranath, S. (2000). Remote Sensing of Ocean Colour in Coastal and Other Optically-Complex Water. Reports of the International Ocean-Colour Coordinating Group (IOCCG) No. 3. Dartmouth: Canada.
7. Sutanto. (1986). Penginderaan Jauh Dasar Jilid I. Gadjah Mada University Press: Yogyakarta.
8. Sutanto. (1987). Penginderaan Jauh Dasar Jilid II. Gadjah Mada University Press: Yogyakarta.
9. Wirabumi, P. (2023). Modul Project Analisis Perubahan Penutup dan Penggunaan Lahan. UNESA: Surabaya.

Supporters:

1. Prahasta, E. (2015). Pengolahan Data Sistem LIDAR (Light Detection and Ranging). Informatika Press.
2. Indarto. (2014). Teori dan Praktek penginderaan Jauh. Yogyakarta: Andi Yogyakarta.
3. Burrough, P. A. (1986). Principles of Geographical Information Systems for Land Resources Assessment. Oxford: Clarendon Press.
4. Barret, E. C., and Curtis, L. F. (1992). Introduction to Environmental Remote Sensing. 3rd Edition. Chapman & Hall.
5. Swain, P. H., and Davis, S. M (eds). (1978). Remote Sensing: The Quantitative Approach. Mc Graw-Hill. New York.
6. Hagget, P. (1983). Geography A Modern Synthesis. Harper & Row PLB. New York.

Supporting lecturer	Prof. Dr. Ketut Prasetyo, M.S. Dr. Aida Kurniawati, S.Pd., M.Si. Mohammad Daman Huri, S.Pd., M.Sc. Putu Wirabumi, S.Si., M.Sc.

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	Analyze basic concepts, basic principles and procedures in remote sensing	1. Explain the meaning (position of remote sensing, limitations of remote sensing, basic concepts), basic principles and procedures in remote sensing 2. Accuracy of analysis regarding basic concepts, basic principles and procedures in remote sensing	**Criteria:** 1. Minimum Completeness Criteria (KKM): > 65 2. Learning Process Assessment 3. Assessment of Learning Outcomes **Form of Assessment** : Participatory Activities	1. Lecture 2. Question and Answer 3. Discussion 2 X 50		**Material:** Understanding and Basic Principles of Remote Sensing **References:** *Lillesand, TM, Kiefer, RW, and Chipman, JW (2015). Remote Sensing and Image Interpretation Seventh Edition. New York: John Willey and Sons.* **Material:** The Position of Remote Sensing in Geography and the Limits of Remote Sensing **Bibliography:** *Jensen, JR (2015). Introductory Digital Image Processing: A Remote Sensing Perspective. 4th Edition. USA: Pearson Education.* **Material:** Internal Structure of Geography **Bibliography:** *Hagget, P. (1983). Geography A Modern Synthesis. Harper & Row PLB. New York.*	5%

2	Analyzing remote sensing systems	1. Distinguish between remote sensing systems based on: (1) how to utilize electromagnetic energy; (2) vehicle/platform; (3) electromagnetic spectrum 2. Accuracy of analysis regarding remote sensing systems	**Criteria:** 1. Minimum Completeness Criteria (KKM): > 65 2. Learning Process Assessment 3. Assessment of Learning Outcomes **Form of Assessment** : Participatory Activities	1. Lecture 2. Question and Answer 3. Discussion 2 X 50		**Material:** Remote Sensing Systems **References:** *Lillesand, TM, Kiefer, RW, and Chipman, JW (2015). Remote Sensing and Image Interpretation Seventh Edition. New York: John Willey and Sons.* **Material:** Remote Sensing Systems **References:** *Jensen, JR (2015). Introductory Digital Image Processing: A Remote Sensing Perspective. 4th Edition. USA: Pearson Education.* **Material:** Remote Sensing Systems **References:** *Jensen, JR (2014). Remote Sensing of the Environment: an Earth Resource Perspective. Second Edition. England: Pearson New International Edition.*	5%
3	Analyze the basic physics of remote sensing	1. Have knowledge regarding the area of electormagnetic waves and atmospheric windows, as well as spectral channels or bands or channels 2. Accuracy of analysis regarding the physical basis of remote sensing	**Criteria:** 1. Minimum Completeness Criteria (KKM): > 65 2. Learning Process Assessment 3. Assessment of Learning Outcomes **Form of Assessment** : Participatory Activities	1. Lecture 2. Question and Answer 3. Discussion 2 X 50		**Material:** Electromagnetic Wave Regions and Atmospheric Windows **References:** *Lillesand, TM, Kiefer, RW, and Chipman, JW (2015). Remote Sensing and Image Interpretation Seventh Edition. New York: John Willey and Sons.* **Material:** Main Sources of Remote Sensing and Electromagnetic Wave Spectrum **References:** *Jensen, JR (2015). Introductory Digital Image Processing: A Remote Sensing Perspective. 4th Edition. USA: Pearson Education.*	5%

4	Evaluating atmospheric interference or effects in remote sensing	1. Understand the atmospheric window region and forms of atmospheric interference or effects: absorption and scattering (Rayleigh, Mie, and non-selective) 2. Accuracy of evaluation of atmospheric interference or effects in remote sensing	**Criteria:** 1. Minimum Completeness Criteria (KKM): > 65 2. Learning Process Assessment 3. Assessment of Learning Outcomes **Form of Assessment** : Participatory Activities	1. Lecture 2. Question and Answer 3. Discussion 2 X 50		**Material:** Atmospheric Disturbances or Effects **References:** *Jensen, JR (2014). Remote Sensing of the Environment: an Earth Resource Perspective. Second Edition. England: Pearson New International Edition.* **Material:** Atmospheric Window Region **References:** *Jensen, JR (2015). Introductory Digital Image Processing: A Remote Sensing Perspective. 4th Edition. USA: Pearson Education.* **Material:** Atmospheric Disturbances or Effects **References:** *Lillesand, TM, Kiefer, RW, and Chipman, JW (2015). Remote Sensing and Image Interpretation Seventh Edition. New York: John Willey and Sons.*	5%

5	Analyze the interaction of electromagnetic radiation with objects	1. Understand the phenomena that occur when electromagnetic radiation interacts with objects: (1) reflectance; (2) absorption; (3) transmission (forwarded); (4) scattering; (5) emittance (emissions); and (6) attenuation (energy weakening) 2. Accuracy of analysis regarding the interaction of electromagnetic radiation with objects	**Criteria:** 1. Minimum Completeness Criteria (KKM): > 65 2. Learning Process Assessment 3. Assessment of Learning Outcomes **Form of Assessment** : Participatory Activities	1. Lecture 2. Question and Answer 3. Discussion 2 X 50		**Material:** Interaction of Electromagnetic Radiation on Objects **Library:** *Lillesand, TM, Kiefer, RW, and Chipman, JW (2015). Remote Sensing and Image Interpretation Seventh Edition. New York: John Willey and Sons.* **Material:** Types of Reflections on the Earth's Surface **References:** *Jensen, JR (2015). Introductory Digital Image Processing: A Remote Sensing Perspective. 4th Edition. USA: Pearson Education.* **Material:** Radiance and Reflectance **References:** *Jensen, JR (2014). Remote Sensing of the Environment: an Earth Resource Perspective. Second Edition. England: Pearson New International Edition.*	5%

6	Evaluating the concept of resolution in remote sensing	1. Understand the concept of resolution in Remote Sensing: (1) Spatial Resolution; (2) Spectral Resolution; (3) Radiometric Resolution; (4) Temporal Resolution 2. Accuracy evaluation regarding the concept of resolution in remote sensing	**Criteria:** 1. Minimum Completeness Criteria (KKM): > 65 2. Learning Process Assessment 3. Assessment of Learning Outcomes **Form of Assessment** : Project Results Assessment / Product Assessment	1. Lecture 2. Question and Answer 3. Discussion 4. Individual Assignment 2 X 50		**Material:** Taxonomy of Spatial Data, Relationship between Data Types and Models, Digital Images, Bit-coding in Imaging Literature **:** *Danoedoro, Projo. (2012). Introduction to Digital Remote Sensing. Yogyakarta: ANDI Yogyakarta.* **Material:** Concept of Resolution **Bibliography:** *Jensen, JR (2015). Introductory Digital Image Processing: A Remote Sensing Perspective. 4th Edition. USA: Pearson Education.* **Material:** Concept of Resolution **Bibliography:** *Jensen, JR (2014). Remote Sensing of the Environment: an Earth Resource Perspective. Second Edition. England: Pearson New International Edition.*	5%
7	Analyzing the spectral reflection curves of various objects in remote sensing	1. Understand the spectral response of objects on the earth's surface (water, soil, vegetation, etc.) 2. Accuracy of spectral reflectance curve analysis of various objects in remote sensing	**Criteria:** 1. Minimum Completeness Criteria (KKM): > 65 2. Learning Process Assessment 3. Assessment of Learning Outcomes **Form of Assessment** : Project Results Assessment / Product Assessment	1. Lecture 2. Question and Answer 3. Discussion 4. Individual Assignment 2 X 50		**Material:** Spectral Reflection Curve **Bibliography:** *Jensen, JR (2015). Introductory Digital Image Processing: A Remote Sensing Perspective. 4th Edition. USA: Pearson Education.*	5%

8	Midterm Exam (UTS)	Accuracy according to the assessment rubric	**Criteria:** 1. Minimum Completeness Criteria (KKM): > 65 2. Learning Process Assessment 3. Assessment of Learning Outcomes **Form of Assessment** : Test		LMS SIDIA 2 X 50	**Material:** Meetings 1 to 7 **References:** *Lillesand, TM, Kiefer, RW, and Chipman, JW (2015). Remote Sensing and Image Interpretation Seventh Edition. New York: John Willey and Sons.* **Material:** Meetings 1 to 7 **References:** *Jensen, JR (2015). Introductory Digital Image Processing: A Remote Sensing Perspective. 4th Edition. USA: Pearson Education.* **Material:** Meetings 1 to 7 **References:** *Jensen, JR (2014). Remote Sensing of the Environment: an Earth Resource Perspective. Second Edition. England: Pearson New International Edition.* **Material:** Meetings 1 to 7 **References:** *Danoedoro, Projo. (2012). Introduction to Digital Remote Sensing. Yogyakarta: ANDI Yogyakarta.* **Material:** Meetings 1 to 7 **Reader:** *Sutanto. (1986). Basic Remote Sensing Volume I. Gadjah Mada University Press: Yogyakarta.* **Material:** Meetings 1 to 7 **Reader:** *Sutanto. (1987). Basic Remote Sensing Volume II. Gadjah Mada University Press: Yogyakarta.*	10%

9	Evaluating photographic and non-photographic remote sensing images	1. Know the differences between photographic and non-photographic images based on: (1) sensor; (2) detector; (3) recording process; (4) recording mechanism; (5) electromagnetic spectrum 2. Accuracy of evaluation of photographic and non-photographic remote sensing images	**Criteria:** 1. Minimum Completeness Criteria (KKM): > 65 2. Learning Process Assessment 3. Assessment of Learning Outcomes **Form of Assessment** : Project Results Assessment / Product Assessment	1. Lecture 2. Question and Answer 3. Discussion 4. Individual Assignment 2 X 50		**Material:** Photographic and Non-Photographic Images **Reference:** *Sutanto. (1986). Basic Remote Sensing Volume I. Gadjah Mada University Press: Yogyakarta.* **Material:** Photographic and Non-Photographic Images **Reference:** *Sutanto. (1987). Basic Remote Sensing Volume II. Gadjah Mada University Press: Yogyakarta.* **Material:** Photographic and Non-Photographic Images **Bibliography:** *Lillesand, TM, Kiefer, RW, and Chipman, JW (2015). Remote Sensing and Image Interpretation Seventh Edition. New York: John Willey and Sons.* **Material:** Photographic and Non-Photographic Images **References:** *Danoedoro, Projo. (2012). Introduction to Digital Remote Sensing. Yogyakarta: ANDI Yogyakarta.*	5%
10	Analyze the elements of image interpretation and analysis	1. Understanding the systematics of interpretation: (1) detection; (2) identification; (3) introduction; (4) analysis; (5) deduction; (6) classification; (7) idealization 2. Understand the elements of interpretation: (1) hue/color; (2) texture; (3) shape; (4) size; (5) shadow/impression of height or depth; (6) pattern; (7) site; (8) association 3. Understand interpretation and analysis techniques: (1) visual (2) digital 4. Accuracy of analysis regarding elements of image interpretation and analysis	**Criteria:** 1. Minimum Completeness Criteria (KKM): > 65 2. Learning Process Assessment 3. Assessment of Learning Outcomes **Form of Assessment** : Assessment of Project Results / Product Assessment, Practices / Performance	1. Lecture 2. Question and answer 3. Discussion 4. Individual Assignment 2 X 50		**Material:** Image Interpretation and Analysis **Literature:** *Danoedoro, Projo. (2012). Introduction to Digital Remote Sensing. Yogyakarta: ANDI Yogyakarta.*	5%

11	Correctly evaluate various objects on the earth's surface through interpreting aerial photographs and high-resolution satellite images through group work	1. (1) delineation results of aerial photography and CSRT images; (2) table of interpretation results; (3) analysis 2. Accurate analysis of objects on the earth's surface through interpretation of aerial photography and high-resolution satellite images through group work	**Criteria:** 1. Minimum Completeness Criteria (KKM): > 65 2. Learning Process Assessment 3. Assessment of Learning Outcomes **Form of Assessment** : Project Results Assessment / Product Assessment	1. Lecture 2. Question and Answer 3. Discussion 4. Group Assignment 2 X 50		**Material:** Photographic and Non-Photographic Images **References:** *Danoedoro, Projo. (2012). Introduction to Digital Remote Sensing. Yogyakarta: ANDI Yogyakarta.* **Material:** Interpretation of Aerial Photo Images and CSRT **Reference:** *Wirabumi, P. (2023). Project Module Analysis of Changes in Land Cover and Use. UNESA: Surabaya.*	5%
12	Correctly evaluate various objects on the earth's surface through the interpretation of medium resolution satellite images through group work	1. (1) delineation results of medium resolution satellite imagery; (2) table of interpretation results; (3) analysis 2. Accurate evaluation of various objects on the earth's surface correctly through the interpretation of medium resolution satellite images through group work	**Criteria:** 1. Minimum Completeness Criteria (KKM): > 65 2. Learning Process Assessment 3. Assessment of Learning Outcomes **Form of Assessment** : Assessment of Project Results / Product Assessment, Practices / Performance	1. Lecture 2. Question and Answer 3. Discussion 4. Group Assignment 2 X 50		**Material:** Photographic and Non-Photographic Images **References:** *Danoedoro, Projo. (2012). Introduction to Digital Remote Sensing. Yogyakarta: ANDI Yogyakarta.* **Material:** The concept of resolution in remote sensing **References:** *Jensen, JR (2015). Introductory Digital Image Processing: A Remote Sensing Perspective. 4th Edition. USA: Pearson Education.* **Material:** Interpretation of Medium Resolution Satellite Images **References:** *Wirabumi, P. (2023). Project Module Analysis of Changes in Land Cover and Use. UNESA: Surabaya.*	5%

13	Arrange data verification and validation in the field through group work	1. (1) results of data verification and validation in the field; (2) table of interpretation results; (3) analysis 2. Accuracy in compiling data verification and validation in the field through group work	**Criteria:** 1. Minimum Completeness Criteria (KKM): > 65 2. Learning Process Assessment 3. Assessment of Learning Outcomes **Form of Assessment** : Project Results Assessment / Product Assessment	1. Lecture 2. Question and Answer 3. Discussion 4. Group Assignment 2 X 50		**Material:** Field Survey **Literature:** *Congalton, RG, & Green, K. (2009). Assessing the Accuracy of Remotely Sensed Data: Principles and Practice. Boca Raton: Taylor & Francis Group.* **Material:** Verification and Validation of Field Data **References:** *Wirabumi, P. (2023). Project Module for Analysis of Changes in Land Cover and Use. UNESA: Surabaya.*	10%
14	Designing re-interpretation, accuracy testing, and making final map results through group work	1. (1) field data processing; (2) accuracy test; (3) final result map 2. Accuracy in designing re-interpretation, accuracy testing, and making final map results through group work	**Criteria:** 1. Minimum Completeness Criteria (KKM): > 65 2. Learning Process Assessment 3. Assessment of Learning Outcomes **Forms of Assessment** : Project Results Assessment / Product Assessment, Practical Assessment	1. Lecture 2. Question and answer 3. Discussion 4. Group Assignment 2 X 50		**Material:** Accuracy Test **Literature:** *Congalton, RG, & Green, K. (2009). Assessing the Accuracy of Remotely Sensed Data: Principles and Practice. Boca Raton: Taylor & Francis Group.* **Material:** Re-Interpretation and Accuracy Test **Literature:** *Wirabumi, P. (2023). Project Module Analysis of Changes in Land Cover and Use. UNESA: Surabaya.*	5%
15	Make presentations of project or product results through group work	1. (1) Field survey; (2) accuracy test; (3) presentation of project/product results 2. Accuracy in making presentations of project or product results through group work	**Criteria:** 1. Minimum Completeness Criteria (KKM): > 65 2. Learning Process Assessment 3. Assessment of Learning Outcomes **Form of Assessment** : Project Results Assessment / Product Assessment	1. Lecture 2. Question and Answer 3. Discussion 4. Group Assignment 5. Presentation of Project/Product Results 2 X 50		**Material:** Accuracy Test **Literature:** *Congalton, RG, & Green, K. (2009). Assessing the Accuracy of Remotely Sensed Data: Principles and Practice. Boca Raton: Taylor & Francis Group.*	10%
16	Final Semester Examination (UAS)	Accuracy according to the assessment rubric	**Criteria:** 1. Minimum Completeness Criteria (KKM): > 65 2. Learning Process Assessment 3. Assessment of Learning Outcomes **Form of Assessment** : Project Results Assessment / Product Assessment, Portfolio Assessment		LMS SIDIA 2 x 50	**Material:** Meetings 1 to 15 **References:** *Lillesand, TM, Kiefer, RW, and Chipman, JW (2015). Remote Sensing and Image Interpretation Seventh Edition. New York: John Willey and Sons.* **Material:** Meetings 1 to 15 **References:** *Jensen, JR (2015).*	10%

						Introductory Digital Image Processing: A Remote Sensing Perspective. 4th Edition. USA: Pearson Education. **Material:** Meetings 1 to 15 **References:** *Jensen, JR (2014). Remote Sensing of the Environment: an Earth Resource Perspective. Second Edition. England: Pearson New International Edition.* **Material:** Meetings 1 to 15 **References:** *Danoedoro, Projo. (2012). Introduction to Digital Remote Sensing. Yogyakarta: ANDI Yogyakarta.* **Material:** Meetings 1 to 15 **References:** *Congalton, RG, & Green, K. (2009). Assessing the Accuracy of Remotely Sensed Data: Principles and Practice. Boca Raton: Taylor & Francis Group.* **Material:** Meetings 1 to 15 **Reader:** *Sutanto. (1986). Basic Remote Sensing Volume I. Gadjah Mada University Press: Yogyakarta.* **Material:** Meetings 1 to 15 **Reader:** *Sutanto. (1987). Basic Remote Sensing Volume II. Gadjah Mada University Press: Yogyakarta.*	

Evaluation Percentage Recap: Project Based Learning

No	Evaluation	Percentage
1.	Participatory Activities	25%
2.	Project Results Assessment / Product Assessment	52.5%
3.	Portfolio Assessment	5%
4.	Practical Assessment	2.5%
5.	Practice / Performance	5%
6.	Test	10%
		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.