	Universitas Negeri Surabaya Vocational Faculty, D4 Informatics Management Study Program	Document Code		

SEMESTER LEARNING PLAN

Courses		CODE	Course Family	Credit Weight			SEMESTER	Compilation Date
Mathematics II		99995740102149		**T=2**	**P=0**	**ECTS=3.18**	2	July 17, 2024

AUTHORIZATION		SP Developer	Course Cluster Coordinator	Study Program Coordinator
		....	....	Dodik Arwin Dermawan, S.ST., S.T., M.T.

Learning model	Case Studies

Program Learning Outcomes (PLO)	PLO study program that is charged to the course
	Program Objectives (PO)
	PLO-PO Matrix

	P.O

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

Short Course Description	Use of specific integrals to find area, content, arc length, center of gravity, moment of inertia, double integrals, matrices, determinants, systems of linear equations and their applications.

References	Main :
	1. Baisuni , MH , 1986 , Kalkulus , Jakarta : Universitas Indonesia. 2. Purcell dan Verberg,1992,Kalkulus dan Geometri Analitis, Jakarta : Erlangga. 3. Stroud, KA, 1989, Matematika untuk Teknik, Alih bahasa: Erwin Sucipto, Jakarta Erlangga. 4. Verberg, Purcell, Rigdon, 2007, Kalkulus, Jakarta : Erlangga
	Supporters:

Supporting lecturer	Dodik Arwin Dermawan, S.ST., S.T., M.T. Ferly Isnomo Abdi, S.T., S.Pd., M.T.

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 communicate their understanding of indefinite integrals	according to the rubric	**Criteria:** According to the Rubric	Lectures, discussions, questions and answers 100			0%

2	Students are able to communicate their understanding of definite integrals and their application to the area of land and volume of rotating objects, arc length	according to the rubric	**Criteria:** According to the Rubric	Lectures, discussions, questions and answers 100			0%
3	Students are able to communicate their understanding of definite integrals and their application to the area of land and volume of rotating objects, arc length	according to the rubric	**Criteria:** According to the Rubric	Lectures, discussions, questions and answers 100			0%
4	Students are able to communicate their understanding of the application of definite integrals, center of gravity, moment of inertia and pressure of liquids	according to the rubric	**Criteria:** According to the Rubric	Lectures, discussions, questions and answers 100			0%
5	Students are able to communicate their understanding of the application of definite integrals, center of gravity, moment of inertia and pressure of liquids	according to the rubric	**Criteria:** According to the Rubric	Lectures, discussions, questions and answers 100			0%
6	Students are able to communicate their understanding of the concept of double integrals and their applications	according to the rubric	**Criteria:** According to the Rubric	Lectures, discussions, questions and answers 100			0%
7	Students are able to communicate their understanding of the concept of double integrals and their applications	according to the rubric	**Criteria:** According to the Rubric	Lectures, discussions, questions and answers 100			0%
8	USS (attached)	USS (attached)	**Criteria:** USS (attached)	USS (attached) USS (attached)			0%
9	Students are able to communicate their understanding of ordinary differential equations	according to the rubric	**Criteria:** According to the Rubric	Lectures, discussions, questions and answers 100			0%
10	Students are able to communicate their understanding of ordinary differential equations	according to the rubric	**Criteria:** According to the Rubric	Lectures, discussions, questions and answers 100			0%
11	Students are able to communicate their understanding of ordinary differential equations	according to the rubric	**Criteria:** According to the Rubric	Lectures, discussions, questions and answers 100			0%
12	Students are able to communicate their understanding of ordinary differential equations	according to the rubric	**Criteria:** According to the Rubric	Lectures, discussions, questions and answers 100			0%

13	Students are able to communicate their understanding of matrices and determinants	according to the rubric	**Criteria:** According to the Rubric	Lectures, discussions, questions and answers 100			0%
14	Students are able to communicate their understanding of matrices and determinants	according to the rubric	**Criteria:** According to the Rubric	Lectures, discussions, questions and answers 100			0%
15	Students are able to communicate their understanding of the System of Linear Equations for Liquid Pressure	according to the rubric	**Criteria:** According to the Rubric	Lectures, discussions, questions and answers 100			0%
16							0%

Evaluation Percentage Recap: Case Study

No	Evaluation	Percentage
		0%

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.