



MINISTRY OF EDUCATION, CULTURE, RESEARCH, AND TECHNOLOGY
UNIVERSITAS NEGERI JAKARTA
FACULTY OF MATHEMATICS AND NATURAL SCIENCE

Jl. Rawamangun Muka, RT 11/RW14, Rawamangun, Pulo Gadung
 East Jakarta City, Special Capital Region Of Jakarta 13220
 Email: pend.mat@unj.ac.id, <http://fmipa.unj.ac.id/penmat>

Space Geometry

Module Name	Modul Kursus
Module Level	Program Sarjana
Code, if applicable	3115-011-2
Sub-title, if applicable	-
Courses, if applicable	Space Geometry
Semester(s) in which the module is taught	4 th
Person responsible for the module	Lecturer
Lecturer (s)	Leny Dhianti Haeruman, M. Pd Aris Hadiyan W., M. Pd.
Language	Bahasa Indonesia
Relation to Curriculum	Study Programme's Compulsory Courses
Type of teaching, contact hours	The teaching methods used in this course are: <ul style="list-style-type: none"> - Learning activity (group discussion, case study, and video based learning) - Structure task (esai dan case study) - Project based learning
Workload	Total workload is 90,66 hours (3 ECTS) per semester which consists of 26,66 hours learning activity, 32.00 hours structure task and 32.00 hours individual learning.
Credit Points	2 sks (3 ECTS)
Requirements according to the examination	Students must attend all lectures and submit all individual and group assignments scheduled before the final exam.



MINISTRY OF EDUCATION, CULTURE, RESEARCH, AND TECHNOLOGY
UNIVERSITAS NEGERI JAKARTA
FACULTY OF MATHEMATICS AND NATURAL SCIENCE

Jl. Rawamangun Muka, RT 11/RW14, Rawamangun, Pulo Gadung
 East Jakarta City, Special Capital Region Of Jakarta 13220
 Email: pend.mat@unj.ac.id, <http://fmipa.unj.ac.id/penmat>

regulations									
Recommended prerequisites									
Program intended learning outcomes	<p>PLO-5. Able to master the basics of mathematical theoretical concepts, including mathematical logic, discrete mathematics, algebra, analysis and geometry as well as probability theory and statistics</p> <p><i>The Course Learning Outcomes (CLO) to be achieved in this course are:</i></p> <p>CLO 1 : Understanding the relationship between elements in space</p> <p>CLO 2 : Understanding about distance and shortest link between crossed lines</p> <p>CLO 3 : Understand about the intersection of a plane to the shape and with the actual shape</p> <p>CLO 4 : Understanding the volume of a flat side shape</p> <p>CLO 5 : Understanding the volume of a flat side shape</p> <p>CLO 6 : Understanding the volume of a curved side shape</p> <p>CLO 7 : Solving problems related to the relationship between two or more different spatial figure.</p> <table border="1" style="margin-left: auto; margin-right: auto; border-collapse: collapse; text-align: center;"> <thead> <tr> <th style="padding: 5px;">CLO</th> <th style="padding: 5px;">PLO</th> </tr> </thead> <tbody> <tr> <td style="padding: 5px;">1</td> <td style="padding: 5px;">5</td> </tr> <tr> <td style="padding: 5px;">2</td> <td style="padding: 5px; background-color: #cccccc;"></td> </tr> <tr> <td style="padding: 5px;">3</td> <td style="padding: 5px; background-color: #cccccc;"></td> </tr> </tbody> </table>	CLO	PLO	1	5	2		3	
CLO	PLO								
1	5								
2									
3									



MINISTRY OF EDUCATION, CULTURE, RESEARCH, AND TECHNOLOGY
UNIVERSITAS NEGERI JAKARTA
FACULTY OF MATHEMATICS AND NATURAL SCIENCE

Jl. Rawamangun Muka, RT 11/RW14, Rawamangun, Pulo Gadung
 East Jakarta City, Special Capital Region Of Jakarta 13220
 Email: pend.mat@unj.ac.id, <http://fmipa.unj.ac.id/penmat>

		4		
		5		
		6		
		7		
		8		
Content	<ol style="list-style-type: none"> 1. Relationships between elements in space, points with lines, points with planes, lines with lines, lines with planes and planes with planes 2. Distance: two points, a point with a line, the distance between a point and a plane, a line with a line, a line with a plane and a plane with a plane 3. Sections of a plane to geometric shapes and nets of prisms and pyramids 4. Volume of prisms and pyramids 5. Volume of truncated prisms and pyramids 6. Comparison of the volume of the parts of a geometric shape due to the intersection of a plane with the shape 7. Area and volume of the tube 8. Area and volume of cones and truncated cones 9. Area and volume of the ball and the parts of the ball: the wedge of the ball, the section of the ball, the plane of the ball and the ring of the ball 10. The volume of the common shape between two different intersecting geometric figures 			



MINISTRY OF EDUCATION, CULTURE, RESEARCH, AND TECHNOLOGY
UNIVERSITAS NEGERI JAKARTA
FACULTY OF MATHEMATICS AND NATURAL SCIENCE

Jl. Rawamangun Muka, RT 11/RW14, Rawamangun, Pulo Gadung
 East Jakarta City, Special Capital Region Of Jakarta 13220
 Email: pend.mat@unj.ac.id, [http: https://fmipa.unj.ac.id/penmat](http://fmipa.unj.ac.id/penmat)

Forms of Assessment	Assessment of the learning process according to the following components: Final Examination 40%, Middle Examination 30%, assignments 30%
Study and examination requirements and forms of examination	<p>Study and examination requirements:</p> <ul style="list-style-type: none"> - Students must be present 15 minutes before class starts. - Students must turn off all electronic devices. - Students are required to notify the lecturer if they are absent from class due to illness, etc. - Students must turn in all classwork before the deadline. - Students must take the exam to get the final grade. <p>Form of examination:</p> <p>Written exam</p>
Media employed	laptop, Internet, LCD, Whiteboard, Zoom/GoogleTemui/Tim Microsoft, LMS.
Reading list	Main Reference
	Kusni & Heri Sutarto (2018). <i>Geometri Ruang Untuk Perguruan Tinggi</i> . Magnum