MODULE HANDBOOK

Module Name:	Analytical Geometry
Module Level:	Sarjana (S-1) / Bachelor
Abbreviation, if applicable:	8420203065
Sub-heading, if applicable:	-
Course included in the module, if applicable:	-
Semester/term:	3/ Second year
Module Coordinator(s):	Dr. Susanah, M.Pd
Lecturer(s):	Prof. Dr. Siti M. Amin, M.Pd. Dr. Susanah, M.Pd Evangelista LWP, M.Sc.
Language:	Indonesia
Classification within the curriculum:	Compulsory course/~~elective studies~~
Teaching format/class hours per week during the semester	Teaching format: lectures, tutorial assignment, and individual study. 3 x 170 minutes = 510 minutes = 8.5 hours lectures
Workload:	15 weeks per semester consisting of: ➢ 2.5 hours lectures (3 x 50 minutes) per week, ➢ 3 hours tutorial assignments (3 x 60 minutes) per week, ➢ 3 hours individual study (3 x 60 minutes) per week, Total workload : 14x3x170 minutes = 7,140 minutes = 4.76 ECTS*
Credit Point:	3
Requirements:	Geometry (8420203064)

<table>
<tr><td>Learning Goals :</td><td>Knowledge
CLO-1 : Demonstrate knowledge of the coordinate system and point positions at R2 and R3, line equations in R2, plane equations and line equations in R3, places on R2 and R3, circle equations in R2, tangents to circles, polar lines, power in circles and circular beams, spherical equations in R3, tangent to the ball, the area of power in the ball, parabola, ellipse, and hyperbole.
Skill
CLO-2: Solve problems related to the concepts of points, lines, planes, circles, spheres and conic sections.</td></tr>
<tr><td>Content:</td><td>Point and Line position at R^2 or in R^3, the location of the cone, circle, parabola, ellipse, hyperbole, plane, tube, cone and sphere sections and their properties</td></tr>
<tr><td>Study/exam achievements</td><td>➢ Students are considered competent and pass if the final score calculated from the score of midterm exam, assignments, participation, and final exam is at least 55 or C.
➢ Final score is calculated as follows:
➢ 20% midterm exam + 30% assignments + 20% participation + 30% final exam
➢ Final index is defined as follow:
<table><tr><td>Index</td><td>Converted Score</td><td>Score Range</td></tr><tr><td>A</td><td>4.00</td><td>$85 \leq A \leq 100$</td></tr><tr><td>A-</td><td>3.75</td><td>$80 \leq A- < 85$</td></tr><tr><td>B+</td><td>3.50</td><td>$75 \leq B+ < 80$</td></tr><tr><td>B</td><td>3.00</td><td>$70 \leq B < 75$</td></tr><tr><td>B-</td><td>2.75</td><td>$65 \leq B- < 70$</td></tr><tr><td>C+</td><td>2.50</td><td>$60 \leq C+ < 65$</td></tr><tr><td>C</td><td>2.00</td><td>$55 \leq C < 60$</td></tr><tr><td>D</td><td>1.00</td><td>$40 \leq D < 55$</td></tr><tr><td>E</td><td>0.00</td><td>$0 \leq E < 40$</td></tr></table></td></tr>
<tr><td>Forms of Media</td><td>Slides and LCD projectors, whiteboard</td></tr>
<tr><td>Literature</td><td>[1] Susanah. 2018. Geometri Analitika. Surabaya: Unesa University Press
[2] Lee Peng Yee, Fan Liang Huo. 2002. Mathematics 2. Singapore: Shing Lee Publisher PTE. LTD.</td></tr>
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	[3] http://www.mathportal.org/analytic-geometry/analytic-geometry-2d [4] http://www.intmath.com/plane-analytic-geometry/intro.php.
Note	*Total hours per 1 credit in 1 semester={(1 credit x 170 minutes x 14 weeks)/60 minutes}=39,67 hours. Each ECTS equals with 25 hours therefore 1 credit in 1 semester equals 1,59 ECTS.