MODULE HANDBOOK

Module Name:	Transformational Geometry
Module Level:	Sarjana (S-1) / Bachelor
Abbreviation, if applicable:	8420203067
Sub-heading, if applicable:	-
Course included in the module, if applicable:	-
Semester/term:	6/ Third year
Module Coordinator(s):	Prof. Dr. Mega Teguh Budiarto, M.Pd
Lecturer(s):	Dr. Susanah, M.Pd Rudianto Artiono, M.Si 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: ➢ 3 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 Analytical Geometry 8420203065
Learning Goals :	**Knowledge (KNO-1)** CLO-1 : Demonstrate knowledge and insight into the definition of transformation, isometry, and its properties. CLO-2 : Demonstrate knowledge and insight about reflection, half turn, shear, rotation, shear mirroring, similarity, displacement and strain, inversion and their properties. **Skill (SKI-2)** CLO-3 : Solve problems related to transformational geometry

<table>
<tr><td>Content:</td><td>Transformation, Reflection, Half Rotation, Translation, Rotation, Shear Reflection, Similarity, Dilation, Shearing And Stretching, and Inversion</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>
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</td></tr>
<tr><td>Forms of Media</td><td>Slides and LCD projectors, whiteboard</td></tr>
<tr><td>Literature</td><td>
[1] Budiarto, M.T. 2010. Geometri Transformasi (Cetakan Kedua). Surabaya: UNESA University Press Anggota IKAPI
[2] Eccles, Frank R, 1971, An Introduction to Transformational Geometry, California, Addison Wesley Publishing Company
[3] Martin,George F, 1980, Transformational Geometry an Introduction to Symmetry, New York: Springer-Verlag
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<tr><td>Note</td><td>*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.</td></tr>
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