MINISTRY OF HIGHER EDUCATION, SCIENCE, AND TECHNOLOGY
UNIVERSITAS NEGERI SURABAYA
FACULTY OF MATHEMATICS AND NATURAL SCIENCES
UNDERGRADUATE PROGRAM OF MATHEMATICS EDUCATION
Ketintang Campus, Jalan Ketintang, C8 C9 Building, Surabaya 60231
Phone: +62 895335466373, email: s1-pmat@unesa.ac.id
Website: https://pendidikan-matematika.fmipa.unesa.ac.id/

Module Name:	Abstract Algebra
Module Level:	Sarjana (S-1) / Undergraduate
Abbreviation, if applicable:	8420202004
Sub-heading, if applicable:	-
Course included in the module, if applicable:	-
Semester/term:	VII / Fourth year
Module Coordinator(s):	Dr. Endah Budi Rahaju, M. Pd.
Lecturer(s):	Dr. Endah Budi Rahaju, M. Pd Prof. Dr. Dwi Juniati, M. Si. Dr. Sri Suryanti, M. Si. Budi Priyo Prawoto, M. Si.
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:	16 weeks per semester consisting of: ● 1 hour lectures (1 x 50 minutes) per week, ● 1 hours assignments (1 x 60 minutes) per week, ➢ 1 hours individual study (1 x 60 minutes) per week,

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	Total workload : 16x3x170 minutes = 8160 minutes = 136 hours= 4.77 ECTS*
Credit Point:	3
Requirements:	N/A
Learning Goals :	**PLO-5**: Possess basic mathematical knowledge to solve mathematical problems and their applications in education. **PLO-6**: Master the principles of mathematical knowledge to support mathematical thinking skills in solving mathematical problems.
Content:	This course examines sets, functions, group definitions, types of groups and group properties, subgroups and subgroup properties, cyclic groups and permutation groups, cosets and their properties, Lagrange's theorem, normal subgroups, factor groups, subgroup indices, group homomorphisms and isomorphisms.
Study/exam achievements	● Student performance is assessed through a written test, a project for CLO 3, and class participation. These components measure conceptual understanding, application of abstract algebra concepts, and active engagement throughout the course. ● Final score is calculated as follows:

Week	Course Learning Outcomes (CLO)	Programme Learning Outcomes (PLO)	Evaluation (%)
1	CLO-1	PLO-5	3
2	CLO-1	PLO-5	3
3	CLO-2	PLO-5	5
4	CLO-2	PLO-5	5
5	CLO-2	PLO-5	5
6	CLO-2	PLO-5	3

7	CLO-2	PLO-5	3
8	CLO-2	PLO-5	20
9	CLO-3	PLO-6	3
10	CLO-3	PLO-6	3
11	CLO-3	PLO-6	5
12	CLO-3	PLO-6	3
13	CLO-3	PLO-6	3
14	CLO-3	PLO-6	3
15	CLO-3	PLO-6	3
16	CLO-3	PLO-6	30

- Final index is defined as follow:

Index	Converted Score	Score Range
A	4.00	$85 \leq A \leq 100$
A-	3.75	$80 \leq A- < 85$
B+	3.50	$75 \leq B+ < 80$
B	3.00	$70 \leq B < 75$
B-	2.75	$65 \leq B- < 70$
C+	2.50	$60 \leq C+ < 65$
C	2.00	$55 \leq C < 60$
D	1.00	$40 \leq D < 55$
E	0.00	$0 \leq E < 40$

Forms of Media	Slides and LCD projectors, whiteboard
Literature	1. Herstein,I.N.1996.AbstractAlgebra.NewJersey:PrenticeHall,Inc. 2. Herstein,I.N.1975.TopicsinAlgebra.NewYork:JohnWileyandSons. 3. Gallian,J.2013.ContemporaryAbstractAlgebra.Boston:Brooks/Cole,CengageLearning
Date of amandement	August, 25. 2025

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Note	Based on the regulation of the minister of education and culture of Indonesia number 3 of 2020 concerning national higher education standards, it is state 1 CU equals to 170 minutes per week. Therefore, in one semester (16 weeks, including midterm a final exam) 1 CU = 170 X 16 = 2.720 minutes or 45.3 hours. Therefore, workhours in 144 CU x 45.3 hours = 6.523,2 hours. Unesa decided that 1 ECTS with 144 CU, 6.523,2/229 ECTS = 28.48 hours, so that 1 CU = 1.59 ECTS