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### Module Handbook

Module Name :	<i>Aljabar Linear Lanjut</i> Advanced Linear Algebra
Module level :	Bachelor degree/Undergraduate Program
Course Code :	4420103008
Abbreviation, if applicable:	-
Courses included in the module, if applicable:	Not Applicable
Semester/Term	8 <sup>th</sup> / fourth year
Module coordinator(s)	Dr. Agung Lukito, M.S
Lecturer(s):	Dr. Agung Lukito, M.S Dr. R. Sulaiman, M.Si
Language:	Bahasa Indonesia (Indonesian Language)
Classification within the curriculum:	<del>Compulsory</del> / Elective
Teaching format/class hours per week during the semester:	3 contact hours of lectures ( <i>sks</i> or credit unit*)
Workload :	3 x 50 minutes lectures, 3 x 60 minutes structured activity, and 3 x 60 minutes individual activity per week, 14 weeks per semester 119 total hours per semester ~ 4.77 ECTS**
Credit Unit:	3 credit unit (4.77 ECTS)
Requirements:	Elementary Number Theory Elementary Linear Algebra



<p>Learning goals/competencies:</p>	<p><b>Knowledge (KNO-1):</b> Demonstrating mathematical knowledge and mathematical insight.</p> <p>CLO-1: Demonstrate mastery of the concept of module, extension field, canonic form.</p> <p><b>Skill (SKI-3) :</b> Analyzing the formal structure of mathematical problems and relevant fields.</p> <p>CLO-2: Analyzing the formal structure of extension field</p>
<p>Content</p>	<p>This course discusses about Module, extension field, canonic form. Lecture activities are carried out in a student center with discussions, observations, project assignments, and presentations.</p>

<p>Attribute Soft skill:</p>	<p>Active communication; Discipline; Collaboration; Responsibility; and Argumentation in class.</p>											
<p>Study/exam achievements:</p>	<p>The final grade (<i>NA</i>) is calculated based on the following ratio:</p> <table border="1" data-bbox="539 1339 1347 1664"> <thead> <tr> <th data-bbox="539 1339 943 1406">Assessment Components</th> <th data-bbox="943 1339 1347 1406">Percentage of contribution</th> </tr> </thead> <tbody> <tr> <td data-bbox="539 1406 943 1473">Participation</td> <td data-bbox="943 1406 1347 1473">20%</td> </tr> <tr> <td data-bbox="539 1473 943 1541">Assignment</td> <td data-bbox="943 1473 1347 1541">30%</td> </tr> <tr> <td data-bbox="539 1541 943 1608">Mid-semester test</td> <td data-bbox="943 1541 1347 1608">20%</td> </tr> <tr> <td data-bbox="539 1608 943 1664">Final semester test</td> <td data-bbox="943 1608 1347 1664">30%</td> </tr> </tbody> </table>		Assessment Components	Percentage of contribution	Participation	20%	Assignment	30%	Mid-semester test	20%	Final semester test	30%
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	<p>Grade conversion of 0-100 scale into 0-4 scale is set as below:</p> <table border="1"><thead><tr><th>Letter</th><th>Number</th><th>Grade Interval</th></tr></thead><tbody><tr><td>A</td><td>4,00</td><td><math>85 \leq A \leq 100</math></td></tr><tr><td>A-</td><td>3,75</td><td><math>80 \leq A- &lt; 85</math></td></tr><tr><td>B+</td><td>3,50</td><td><math>75 \leq B+ &lt; 80</math></td></tr><tr><td>B</td><td>3,00</td><td><math>70 \leq B &lt; 75</math></td></tr><tr><td>B-</td><td>2,75</td><td><math>65 \leq B- &lt; 70</math></td></tr><tr><td>C+</td><td>2,50</td><td><math>60 \leq C+ &lt; 65</math></td></tr><tr><td>C</td><td>2,00</td><td><math>55 \leq C &lt; 60</math></td></tr><tr><td>D</td><td>1,00</td><td><math>40 \leq D &lt; 55</math></td></tr><tr><td>E</td><td>0,00</td><td><math>0 \leq E &lt; 40</math></td></tr></tbody></table>	Letter	Number	Grade Interval	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	$0 \leq E < 40$
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Learning Methods :	Student-centered approach; project-based learning; lecturer and discussion; and presentations (structured activities)																														
Form of Media:	Power point slides; video; worksheets, and textbooks																														
Literature (primary references):	<ol style="list-style-type: none"><li>1. Gallian, J. 2011. <i>Contemporary Abstract Algebra</i>, Boston Houghton Mifflin College Div.</li><li>2. Herstein, I.N. 1975. <i>Topics in Algebra</i> 2nd Edition. New York John Wiley and Sons.</li><li>3. Herstein, I.N. 1990. <i>Abstract Algebra</i>. New York John Wiley and Sons.</li></ol>																														
Notes:	*1 credit unit or <i>sks</i> in learning process = three periods consist of: (a) scheduled instruction in a classroom or laboratory (50 minutes); (b) structured activity (60 minutes); and (c) individual activity (60 minutes) according to the Regulation of Indonesia Ministry of Research, Technology, and Higher Education No. 44 Year 2015 jo. the Regulation of Indonesia Ministry of Research, Technology, and Higher Education No. 50 Year 2018.																														



**MINISTRY OF EDUCATION, CULTURE, RESEARCH, AND TECHNOLOGY**

**UNIVERSITAS NEGERI SURABAYA**

**FACULTY OF MATHEMATICS AND NATURAL SCIENCE**

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<p><b>**1 credit unit or <math>sks = 1.59</math> ECTS according to Rector Decree Of Universitas Negeri Surabaya No. 598/UN38/HK/AK/2019</b></p>
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