MODULE HANDBOOK

Module Name:	Number Theory
Module Level:	Sarjana (S-1) / Bachelor
Abbreviation, if applicable:	8420203221
Sub-heading, if applicable:	-
Course included in the module, if applicable:	-
Semester/term:	3/ Second year
Module Coordinator(s):	Dr. R. Sulaiman, M.Si
Lecturer(s):	Dr. R. Sulaiman, M.Si Dr. agung Lukito, M.S.
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:	Elementary Number Theory
Learning Goals:	**Knowledge (KNO-1)** CLO-1: Able to identify and explain solving simple problems using The concepts of number include primitive roots and indices, linear congruence systems, quadratic congruence, and fractions **Skill (SKI-2)** CLO-2: Able to use the concepts and properties of number include primitive roots and indices, linear congruence systems, quadratic congruence, and fractions in solving more general mathematical problems.
Content:	The concepts of number include primitive roots and indices, linear congruence systems, quadratic congruence, and fractions.

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<td>Study/exam achievements</td>
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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><th>Index</th><th>Converted Score</th><th>Score Range</th></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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<tr>
<td>Forms of Media</td>
<td>Slides and LCD projectors, whiteboard</td>
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<tr>
<td>Literature</td>
<td>
[1] Rosen, K. H. 2018. Elementary Number Theory and its Application (6th edition). New York: Addison – Wesley Publishing Company.
[2] Niven, Ivan, Herbert S. Zuckerman, Hugh L. Montgomery. 1991. An Introduction to The Theory of Numbers. Canada.John Wiley & Sons, Inc
[3] Grifin, Harriet. 1954. Elementary Theory of Number. McGraw-Hill Book Co. Inc.
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<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>
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