



**UNIVERSITAS NEGERI PADANG**  
FACULTY OF MATHEMATICS AND NATURAL SCIENCES  
MATHEMATICS DEPARTMENT, MATHEMATICS EDUCATION STUDY PROGRAM  
Main Campus Universitas Negeri Padang.  
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## Bachelor of Mathematics Education

## MODULE HANDBOOK

Module name:	Introduction to Topology
Module level, if applicable:	Bachelor
Code:	MAT2.61.8103
Sub-heading, if applicable:	-
Classes, if applicable:	Introduction to Topology
Semester:	8 <sup>th</sup> (eight)
Module coordinator:	Dra. Hj. Helma, M. Si.
Lecturer(s):	Dra. Hj. Helma, M. Si., and Team
Language:	Bahasa Indonesia
Classification within the curriculum:	Study Program Elective Course
Teaching format / class hours per week during the semester:	Teaching format: <ul style="list-style-type: none"><li>• Lectures (face to face activities): group discussion, expository</li><li>• Structured assignment</li><li>• Independent activities</li></ul> 3 x 170 minutes = 510 minutes = 8.50 hours
Workload:	16 weeks per semester include midterm exam and final exam consisting of: <ul style="list-style-type: none"><li>• 2.50 hours lectures (3 x 50 minutes) per week,</li><li>• 3 hours structured assignments (3 x 60 minutes) per week,</li><li>• 3 hours Independent activities (3 x 60 minutes) per week</li></ul> 16 x 170 x 3 = 8160 Minutes = 136 hours = 4.53 ECTS
Credit points:	3 SKS (4.53 ECTS)
Prerequisite's course(s):	Calculus, Advanced Calculus, Vector Calculus, Plane and Spaces Geometry Analytic, Elementary Linear Algebra, Abstract Algebra

<p>Course outcomes:</p>	<p>After taking this course the students have ability to:</p> <p>CO 1: Distinguish the difference between open sets-closed set, between discrete topology – indiscrete topology and between separation properties.</p> <p>CO 2: Apply the concept continuous mapping between topological spaces, connected spaces and compact spaces, several separation properties.</p> <p>CO 3: Analyze the difference between product of finite numbers of spaces and the product of infinite numbers of spaces.</p> <p>CO 4: Show responsibility attitude towards works by self and by team works.</p>
<p>Content:</p>	<p>This course discusses:</p> <ol style="list-style-type: none"> <li>1. the difference between open sets-closed set, between discrete topology – indiscrete topology and between separation properties.</li> <li>2. the concept continuous mapping between topological spaces, connected spaces and compact spaces, several separation properties.</li> <li>3. the difference between product of finite numbers of spaces and the product of infinite numbers of spaces.</li> </ol>
<p>Study/exam achievements:</p>	<p>Total Score= (25% x Midterm Exam Score) + (25% x Final Exam Score) + (15% x Assignment: paper, study cases, and resume individual) + (25% x practice) + (10% x Affective Score: Responsibility, class attendance)</p> <p>The initial cut - off points for grades A, A-, B+, B, B-, C+, C, C-, and D should not be less than 85, 80, 75, 70, 65, 60, 55, 50, and 40 out of 100 respectively.</p> <p><b>Explanation:</b></p> <ol style="list-style-type: none"> <li><b>1. Midterm Exam</b> <ul style="list-style-type: none"> <li>✓ Midterm is held at the 8th meeting</li> <li>✓ Midterm is carried out in the classroom with an implementation time of 120 minutes according to the module schedule.</li> </ul> </li> <li><b>2. Final Exam</b> <ul style="list-style-type: none"> <li>✓ Final Exam is held at the 16th meeting</li> <li>✓ Final Exam is carried out in the classroom with an implementation time of 120 minutes which follows the Final Exam implementation schedule of the department</li> </ul> </li> <li><b>3. Assignment</b> <ul style="list-style-type: none"> <li>✓ The assignment can be paper, study cases, and resume individual. The rubric depend on the form of assignment.</li> </ul> </li> <li><b>4. Affective Assessment</b> <ul style="list-style-type: none"> <li>✓ Affective assessment is held in every meeting by observing students' attitude in the class and daily</li> </ul> </li> </ol>

