



UNIVERSITAS NEGERI PADANG
FACULTY OF MATHEMATICS AND NATURAL SCIENCES
MATHEMATICS DEPARTMENT, MATHEMATICS STUDY PROGRAM
Main Campus Universitas Negeri Padang.
Jalan Prof. Dr. Hamka Air Tawar Padang, Sumatera Barat
Telepon: +62 751 7053902, Fax: +62 751 7055628
Email: humas@unp.ac.id

Bachelor of Science in Mathematics

MODULE HANDBOOK

Module name:	Introduction to Topology
Module level,if applicable:	Bachelor
Code:	MAT2.62.7001
Sub-heading,if applicable:	-
Classes,if applicable:	Introduction to Topology
Semester:	7 th
Module coordinator:	Head of Analysis Expertise Group
Lecturer(s):	Dr. Arnellis, M.Si. and Muhammad Subhan, M.Si.
Language:	Indonesian Language and English
Classification within the curriculum:	Elective course in the fourth year (7 th semester) Bachelor Degree
Teaching format / class hours per week during the semester:	<ol style="list-style-type: none">Lectures : Cooperative learning with methods such as expository, drill, and discussion. (3 x 50 minutes = 150 minutes)Structured assignment : Weekly individual written assignment. (3 x 60 minutes = 180 minutes)Individual study (3 x 60 minutes = 180 minutes)
Workload:	The total workload is 136 hours per semester, which consists of 150-minute lectures, 180-minute structured activities, and 180 minutes of self-study. In total, there are 16 weeks per semester, including midterm and final exams.
Credit points:	3 sks = 4.53 ECTS
Prerequisites course(s):	Real Analysis 1 and Real Analysis 2

Course outcomes:	<p>After taking this course the students have ability to:</p> <p>CO1. Distinguish the difference between open sets-closed sets, between discrete topology – indiscrete topology and between separation properties.</p> <p>CO2. Apply the concept continuous mapping between topological spaces, connected spaces and compact spaces, several separation properties.</p> <p>CO3. Analyze the difference between the product of finite numbers of spaces and the product of infinite numbers of spaces.</p>
Content:	<p>Introduction to Topology is a three-credit elective course for all students in mathematics study programs. This course is designed to train students' conceptual understanding of Fundamental concepts and methods in topology. So that students have topology concepts and a good attitude, responsibility, work ethic, curiosity, honesty, creativity, tenacity and confidence. Lecture activities are conducted through lectures, dialogues, and group discussion. Evaluations are carried out through written assignments and students' attitudes.</p>
Study/exam achievements:	<p>The final grade will be weighted as follows:</p> <p>The assessment consists of a final exam (30%), a midterm exam (30%), task (20 %), and affective score: responsibility and attitude(10%).</p> <p>The final and midterm exams are essay tests with a closed book (120 minutes).</p> <p>Weekly assignments (solving selected problems) are given in two forms; group or individual assignments.</p>
Forms of media:	<p>White Board, laptop, projector, e-learning via elearning2.unp.ac.id, and zoom meeting.</p>
Literature:	<ol style="list-style-type: none"> 1. J.R. Munkres, 2013, <i>Topology</i>: Pearson New International Edition, Pearson. 2. Munkres, James R. (1999). <i>Topology 2nd ed.</i> Upper Saddle River, NJ: Prentice Hall.

PLO and CO mapping

	PLO1	PLO2	PLO3	PLO4	PLO5	PLO6	PLO7	PLO8	PLO9	PLO10
CO1			✓							
CO2									✓	
CO3				✓						