Module designation	*Introduction to Topology*
Semester(s) in which the module is taught	*6*
Person responsible for the module	*Kus Prihantoso Krisnawan S.Si., M.Si.*
Language	*Bahasa Indonesia*
Relation to curriculum	*Elective course*
Teaching methods	*150 minutes lectures and 180 minutes structured activities per week.*
Workload (incl. contact hours, self-study hours)	*Total workload is 136 hours per semester which consists of 150 minutes lectures, 180 minutes structured activities, and 180 minutes self-study per week for 16 weeks.*
Credit points	*3*
Required and recommended prerequisites for joining the module	*MAT6321-Real Analysis*
Module objectives/intended learning outcomes	*CO1. Respect the views, opinions, or original findings of others related to topological space* *CO2. Think critically and systematically in understanding definitions, theorems, and properties in mathematics independently or in groups. Demonstrate a collaborative attitude and independence in carrying out individual and group tasks related to topological spaces on lines, planes, and topology in general, types of points in topological spaces, the closure of a set, neighborhoods, and topological subspaces.* *CO3. Explain the concept of topological spaces on lines, planes, and topology in general, types of points in topological spaces, the closure of a set, neighborhoods, and topological subspaces.* *CO4. Explaining the concepts in topology in proving the properties, theorems, or problems that arise in topological spaces on lines, planes, and topology in general, types of points in topological spaces, the closure of a set, neighborhoods, and topological subspaces*

<table>
<tr><td>Content</td><td>In this Introduction to Topology course, we will study Topological Spaces; Interior, Boundary, and Closure; Subspace Topology, Product, and Division; and Continuous Functions and Homeomorphisms. The topic of Topological Spaces will discuss the Definition of Topology, Bases for a Topology, and Closed Sets. Furthermore, the topic of Interior, Boundary, and Closure contains information about the Interior and Closure of a Set, Limit Points, and Boundary of a Set. Next, the topic of Subspace Topology, Multiplication, and Division will discuss Subspace Topology, Multiplication Topology, and Division Topology. Finally, the topic of Continuous Functions and Homeomorphisms will discuss Continuity and Homeomorphisms.</td></tr>
<tr><td>Examination forms</td><td>CO1: Attitude assessment is carried out at each meeting by observation and / or self-assessment techniques using the assumption that basically every student has a good attitude.</td></tr>
<tr><td>Study and examination requirements</td><td>The student is given a value of very good or not good attitude if they show it significantly compared to other students in general. The result of attitude assessment is not a component of the final grades, but as one of the requirements to pass the course. Students will pass from this course if at least have a good attitude.

The final mark will be weight as follow:
<table>
<tr><th>No</th><th>CO</th><th>Assessment Object</th><th>Assessment Technique</th><th>Weight</th></tr>
<tr><td>1</td><td>CO 1</td><td>a. Presentation
b. Discussion</td><td>Observation</td><td>5%
10%</td></tr>
<tr><td>2</td><td>CO 2, CO 3, CO 4</td><td>a. Individual assignment
b. Group assignment
c. Quiz
d. Midterm
e. Final test</td><td>Written</td><td>10%
10%
20%
20%
25%</td></tr>
<tr><td colspan="4">Total</td><td>100%</td></tr>
</table></td></tr>
<tr><td>Reading list</td><td>1. Adam, C. dan Franzosa, R. 2009. Introduction to Topology: Pure and Applied. New Delhi: Dorling Kindersley India
2. Katok, A. dan Sossinsky, A. 2010. Introduction to Modern Topology and Geometry
3. Singh, T.B. 2019. Introduction to Topology.Springer</td></tr>
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