Undergraduate Programme in Mathematics

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MODULE HANDBOOK

Module name	Introduction to Topology
Module level, if applicable	Bachelor
Code, if applicable	MMM- 3108
Subtitle, if applicable	-
Courses, if applicable	Introduction to Topology
Semester(s) in which the module is taught	6th (sixth)
Person responsible for the module	Chair of the Lab. of Analysis
Lecturer	Prof. Dr. Soeparna Darmawijaya
Language	Bahasa Indonesia
Relation to curriculum	Bachelor Degree, Elective Course, 6th semester
Type of teaching, contact hours	150 minutes lectures and 180 minutes structured activities per week.
Workload	Total workload is 136 hours per semester, which consists of 150 minutes lectures per week for 14 weeks, 180 minutes structured activities per week, 180 minutes individual study per week, in total is 16 weeks per semester, including mid exam and final exam.
Credit points	3
Requirements according to the examination regulations	Students have taken Introduction to Topology course (MMM-3108) and have participated in the final examination of the course.
Recommended prerequisites	Topology on real system, sequence, and metric space.
Module objectives/intended learning outcomes	After completing this course the students have ability to: CO 1. use properties of open and closed sets to prove their advance properties. CO 2. prove some characteristics of continuous functions. CO 3. prove some properties of compactness, connectedness, and Hausdorff space.
Content	• Definition of topology space, open set, closed set, dense, subspace, bases, sub-bases. • Continuous function: definition and some properties. • Charachterictics: compactness, connectedness, and Hausdorff space.
Study and examination requirements and forms of examination	The final mark will be weighted as follows: No Assessment methods (components, activities) Weight (percentage) 1 Final Examination 35% − 45% 2 Mid-Term Examination 30% − 35% 3 Class Activities: Quiz, Homework, etc. 25% − 30% The initial cut-off points for grades A, B, C, and D should not be less than 80%, 70%, 50%, and 40%, respectively.
Media employed	Board, LCD Projector, Laptop/Computer
Reading List	1. James R. Munkres, 2017, *Topology second edition*, Pearson. 2. Sze-Tsen Hu, 1964, *Elements of General Topology*, Holden-day, San Fransisco.

PLO and CO Mapping

	PLO 1	PLO 2	PLO 3	PLO 4	PLO 5	PLO 6	PLO 7	PLO 8	PLO 9
CO 1			V			V			V
CO 2			V			V	V		V
CO 3						V	V		V