

## 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:	Real Analysis 2					
Module level, if applicable:	Bachelor					
Code:	MAT1.62.6001					
Subheading, if applicable:	-					
Classes, if applicable:	Real Analysis 2					
Semester:	6 <sup>th</sup> (sixth)					
Module coordinator:	Head of Analysis Expertise Group					
Lecturer(s):	Dr. Arnellis M.Si., Muhammad Subhan, M.Si, Dra. Helma, M.Si., and Dra. Dewi Murni, M.Si.					
Language:	Indonesian Language and English					
Classification within the curriculum:	Elective course in the fourth year (8 <sup>th</sup> semester) Bachelor Degree					
Teaching format / class hours per week during the semester:	<ul> <li>a. Lectures : Cooperative learning with methods such as expository, drill, and discussion. (3 x 50 minutes = 150 minutes)</li> <li>b. Structured assignment : Weekly individual written assignment. (3 x 60 minutes = 180 minutes)</li> <li>c. Individual study (3 x 60 minutes = 180 minutes)</li> </ul>					
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):	1. Analysis Real 1					
Course outcomes:	After taking this course, the students have ability to: CO1. prove concepts such as proving theorems and proving problems of proof CO2 presents and explains its arguments, criticizing a concept CO3. rearrange the series of evidence in a different way					

Content:	1. Definition limit of functions								
	2. Divergen in limit of functions.								
	3. The properties of limit of functions								
	4. The limit of functions, continuity of functions, and								
	uniform continuity								
	5. Monotone function and extreme function								
Study/ exam achievements:	The final grade will be weighted as follows:								
	The assessment consists of a final exam (40%), a mid-term exam (35%), assignments (15%), and discussion (10%). The final and midterm exams are essay tests with a closed book (120 minutes).								
	Individual weekly assignments (doing selected problems) are given.								
	Class group sessions in teams to discuss a given topic.								
Forms of media:	White Board, laptop, Projector, e-learning via								
	elearning2.unp.ac.id, and zoom meeting.								
Literature	<ol> <li>Anton, H (2014), Elementary Linear Algebra 11<sup>th</sup> ed. Wiley</li> <li>Nicholson (2001), Elementary Linear Algebra, Mc-Graw Hill</li> </ol>								

## PLO and CO Mapping

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