

Module designation	Introduction to Ring Theory		
Semester(s) in which the module is taught	4		
Person responsible for the module	Prof. Dr. Agus Maman Abadi M.Si.		
Language	Bahasa Indonesia		
Relation to curriculum	Compulsory 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	MAT6311 - Introduction to Group Theory		
Module objectives/intended learning outcomes	CO1 Demonstrates respect for the opinions of others in completing group and individual assignments related to rings, ring elements, integral domains, fields, ideals, ring factors, ring homomorphisms, ring multiplexes, factorization of integral domains and fields to		
	CO2 Communicating ideas in solving problems related to rings, subrings, integral domains, fields, ideals, ring factors, ring homomorphisms, ring groups, factorization of integral domains and fields both in writing and orally.		
	CO3: Students are able to explain the basic concepts of rings, subrings,		
	integral domains, fields, ideals, factor rings, ring homomorphisms, multiple rings, factorization of integral domains and fields		
	CO 4: Proving the properties of basic ring concepts and their extensions		
	CO 5: Use rings, subrings, integral domains, fields, ideals, factor rings, ring homomorphisms, multiring, factorization of integral domains and fields to solve related problems		
Content	This course covers the basic concepts of rings, subrings, integral domains, fields, ideals, factor rings, ring homomorphisms,		
	multicellular rings, and the factorization of integral domains and fields.		
Examination forms	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.		
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Study and examination		
requirements		

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:

No	со	Assessment Object	Assessment Technique	Weight
1	CO 1	a. Presentat	Observation	5%
		ion		10%
		b. Discussio		
		n		
2	CO 2, CO 3,	a. Individual	Written	10%
	CO 4	assignme		10%
		nt		20%
		b. Group		20%
		assignme		25%
		nt		
		c. Quiz		
		d. Midterm		
		e. Final test		
	100%			

Reading list

- 1. Gallian, J.A.. 2017. Contemporary Abstract Algebra. 9th Edition. Eddison Wesley Publishing Company.
- 2. Malik, D.S., Mordeson, J.M., Sen, M.K.. 1997. Fundamentals of Abstract Algebra. Singapore: McGraw-Hill Companies, Inc.
- 3. Fraleigh, J.B.. 2006. A First Course in Abstract Algebra. Seventh Edition. New York: Addison-Wesley Publishing Company.
- 4. Herstein, I.N..1996. Abstract Algebra. Third Edition. Upper Saddle River: Prentice-Hall Int. Inc.