

Module Descriptions

A **module** is a self-contained **learning unit** within a higher education program that includes thematically related courses and is assigned a **fixed number of credits**. It follows specific **learning objectives**, includes an **assessment component**, and contributes to achieving the qualifications of a degree program. In some countries, "modules" are also named "courses".

Please provide a module description for each module. In addition to the compulsory and elective modules, this also includes credited internships and the final thesis.

Please summarize all module descriptions in one document (Module Handbook) and create a table of contents so that the modules can be found easily.

Module designation	Mathematics Learning Psychology
Semester(s) in which the module is taught	2
Person responsible for the module	Dr. Djamilah Bondan Widjajanti M.Si. Endah Retnowati S.Pd., M.Ed., Ph.D.
Language	Indonesian.
Relation to curriculum	Compulsory.
Teaching methods	Lecture, discussion, and assignment.
Workload (incl. contact hours, self-study hours)	Total workload is 90.67 hours per semester which consists of 100 minutes lectures, 120 minutes structured activities, and 120 minutes self-study per week for 16 weeks.
Credit points	2
Required and recommended prerequisites for joining the module	-



Module objectives/intended learning outcomes	After taking this course the students have ability to:
	CO1. Demonstrating responsibility in completing both individual and group assignments.
	CO2. Explaining the formation of mathematical concepts.
	CO3. Identifying interpersonal and emotional factors that influence the process of learning mathematics.
	CO4. Explaining new models of intelligence.
	CO5. Explaining knowledge, planning, and skills in mathematics instruction.
	CO6. Distinguishing between Behaviorist and Constructivist theories in mathematics instruction.
	CO7. Explaining the meaning of mathematics as an activity of human intelligence.
	CO8. Membedakan pemahaman relasional dan instrumental.
	CO9. Explaining the importance of learning objectives and the quality of understanding.
	CO10. Explaining the role of emotions and perseverance in the learning process.
	CO11. Explaining how to manage risk in mathematics learning.
Content	The course Psychology of Learning Mathematics covers the following topics: (1) the formation of mathematical concepts; (2) interpersonal and emotional factors in learning mathematics; (3) new models of intelligence; (4) from theory to practice; (5) from Behaviorism to Constructivism; (6) mathematics as an activity of human intelligence; (7) relational and instrumental understanding; (8) learning objectives and the quality of understanding; (9) emotions and perseverance; and (10) managing risk in learning. The learning process in this course is conducted in a contextual, integrative, and interactive manner, with a student-centered approach.
Examination forms	Assignments and written tests.
Study and examination requirements	The course assessment is divided into two main components:
	Cognitive Assessment (50%) This includes the following elements:
	o Attendance: 5%
	o Quiz: 5%
	o Assignment:10%
	o Midterm Exam (UTS): 15%
	o Final Exam (UAS): 15%
	 Participatory Assessment (50%) This includes:
	o Case Study: 25%
	o Team-Based Project: 25%
	Total: 100%



Reading list	1. Skemp, R. R.(1987). The Psychology of Learning Mathematics. England: Penguin Books.
	2. Kilpatrick, J., Swafford, J & Findell, B. (Eds.). (2001). Adding It Up: Helping Children Learn Mathematics. Washington, DC: National Academy Press.
	3. Liebeck, P (1984). How Children Learn Mathematics. England: Penguin Books.
	4. Artikel terkait Psikologi Belajar Matematika
	5. Bell, F. H. (1978). Teaching and Learning Mathematics in Secondary School. USA: Wm. C. Brown Company Publishers
	6. Widjajanti, D.B. (2018). Making mathematics classes more humanistic. IOP Publishing. doi:10.1088/1742-6596/1320/1/012096