Module Handbook (Description of Course Unit)

Course designation	Recreational Mathematics
Semester(s) in which the Course is taught	5th
Person responsible for the Course	Aning Wida Yanti
Language	Indonesian Language
Relation to curriculum	Elective
Teaching methods	Lecture (L), Group Discussion (GD), Presentations (P)
Workload (incl. contact hours, self-study hours)	(Estimated) Total workload: Hours in Class, specified in hours: 35 (Lecture) Private study including examination preparation, specified in hours: 84 (Group Discussion & Presentation)
Credit points	3 CP / 4.8 ECTS
Required and recommended prerequisites for joining the Course	Introduction to the Basics of Mathematics
Course objectives/intended learning outcomes	● Students are able to know the theoretical concepts of Recreational Mathematics that support learning mathematics in Primary and Secondary Education as well as for further studies. ● Students are able to apply logical, critical, systematic, and innovative thinking in the context of developing or implementing Recreational Mathematics material in solving everyday problems. ● Students are able to plan, implement, and evaluate learning mathematics in an innovative and Islamic way by applying the concept of Recreational Mathematics. ● Students are able to utilize various learning resources and technology in learning Recreational Mathematics.

Content	Recreational Mathematics discusses: - Algebra Recreation, Arithmetic Recreation, Geometry Recreation, Statistics Recreation - Algebra Olympiad Questions, Mathematics Olympiad Questions, Geometry Olympiad Questions, and Statistics Olympiad Questions for Middle School. - Mathematical Paradoxes - Mathematical Potpourri - Mathematical Puzzles - Math Games - Mathmagic
Examination forms	Final examination, Mid-term examination, Assignment, Exercise
Study and examination requirements	- Attendance 10% - Assignments 30% - Mid-evaluation 20% - Final Evaluation 40% The minimum grade to pass the course is C+
Reading list	- Posamentier, A. S. 2003. *Math Wonders to Inspire Teachers and Students.* Alexander, Virginia USA: Association for Supervision and Curriculum Development. - Beineke, J., and Rosenhouse, J. 2016. *The Mathematics of Entertaining Subjects.* Newyork: Princeton University Press. - Sumilih, G. 2000. *Matematika Rekreasi.* Mojokerto: Galang Sarana Pustaka.