Master Program of Mathematics Education **Module Handbook**

Module Name:	Psychology of Mathematics Education
Module Level:	Master (S-2)
Abbreviation, if applicable:	
Sub-heading, if applicable:	-
Course included in the module, if applicable:	-
Semester/term:	2 / First year
Module Coordinator(s):	Dr. Rini Setianingsih, M.Kes..
Lecturer(s):	1. Dr. Siti Khabibah, M.Pd. 2. Dr. Rini Setianingsih, M.Kes.
Language:	Indonesia
Classification within the curriculum:	Compulsory course / ~~elective studies~~
Teaching format/class hours per week during the semester	Teaching format: lectures, tutorial assignment, and individual study. 2 × 240 minutes = 480 minutes = 8 hours lectures
Workload:	15 weeks per semester consisting of: • 1 hour lecture (1 × 50 minutes) per week, • 2 hours assignments (2 × 45 minutes) per week, • 2 hours individual study (2 × 50 minutes) per week, Total workload: 14 × 2 × 240 minutes = 6,720 minutes ≈ 4.48 ECTS*
Credit Point:	2
Requirements:	N/A
Learning Goals :	**Knowledge (KNO-2)** CLO-1: able to understand students' thinking and learning processes in the domain of mathematics **Competency (COM-1)** CLO-2: able to communicate strategic ideas from the results of exploring the problems of learning mathematics and alternative solutions effectively orally and in writing

<table>
<tr><td></td><td>Social (SOC-1)
CLO-3: able to be responsible and be characterized by faith, intelligent, independent, honest, caring and tough in completing tasks related to identifying problems as well as the solutions offered</td></tr>
<tr><td>Content:</td><td>Studying mathematics learning problems with a psychological approach which includes the formation of mathematical concepts, the idea of a scheme, mathematical thinking, interpersonal and emotional factors and mathematical problem-solving, learning skills (Critical thinking, Creativity, Collaboration, Communication), life skills, literacy skills; mathematical literacy, and statistical literacy</td></tr>
<tr><td>Study/exam achievements</td><td>• Students are considered competent and pass if the final score calculated from the score of midterm exam, assignments, participation, and final exam is at least 55 or C.
• Final score is calculated as follows:
20% midterm exam + 30% assignments + 20% participation + 30% final exam
• Final index is defined as follows:
<table>
<tr><th>Index</th><th>Converted Score</th><th>Score Range</th></tr>
<tr><td>A</td><td>4.00</td><td>$85 \leq A \leq 100$</td></tr>
<tr><td>A-</td><td>3.75</td><td>$80 \leq A- < 85$</td></tr>
<tr><td>B+</td><td>3.50</td><td>$75 \leq B+ < 80$</td></tr>
<tr><td>B</td><td>3.00</td><td>$70 \leq B < 75$</td></tr>
<tr><td>B-</td><td>2.75</td><td>$65 \leq B- < 70$</td></tr>
<tr><td>C+</td><td>2.50</td><td>$60 \leq C+ < 65$</td></tr>
<tr><td>C</td><td>2.00</td><td>$55 \leq C < 60$</td></tr>
<tr><td>D</td><td>1.00</td><td>$40 \leq D < 55$</td></tr>
<tr><td>E</td><td>0.00</td><td>$0 \leq E < 40$</td></tr>
</table></td></tr>
<tr><td>Media employed</td><td>Slides and LCD projectors, white board</td></tr>
<tr><td>Reading list</td><td>[1] Skemp, R. R. 1987.The psychology of learning mathematics. Lawrence Erlbaum Associates, Inc.
[2] Trilling, B. & Fadel, C. 2009. 21st Century Skills: Learning for Life in Our Times. John Wiley & Sons, Inc.
[3] Stacey, K. & Turner, R. (Eds.). 2015. Assessing Mathematical Literacy: The PISA Experience. Springer International Publishing Switzerland.</td></tr>
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	[4] Ben-Zvi, D. & Garfield, J. (Eds). 2005. *The Challenge of Developing Statistical Literacy, Reasoning and Thinking*. Springer Science + Business Media, Inc. [5] Santrock, J. W. 2017. *Eduactional Psychology* (6th Ed.). McGraw Hill. [6] Schoenfeld, A. H. 1987.*Cognitive science and mathematics education*. Routledge. [7] Von Glasersfeld, E. (Ed.). 2002. *Radical constructivism in Mathematics Education*. Kluwer Academic Publishers. [8] Gutiérrez, A.; Leder, G.C.& Boero, P. (Eds.). 2016. *The Second Handbook of Research on the Psychology of Mathematics Education: The Journey Continues*. Sense Publishers [9] Mayer, R.E. & Alexander, P.A. 2011. *Handbook of Research on Learning and Instruction*. Routledge.
Note	*Total hours per 1 credit in 1 semester = {(1 credit × 240 minutes × 14 weeks)/60 minutes} = 56 hours. Each ECTS equals 25 hours, so 1 credit in 1 semester is equivalent to 2.24 ECTS.
Last Amendment	January 2023