



MINISTRY OF EDUCATION, CULTURE, RESEARCH, AND TECHNOLOGY
UNIVERSITAS NEGERI SURABAYA

FACULTY OF MATHEMATICS AND NATURAL SCIENCES
Ketintang Campus, D-1 Building, Surabaya 60231 +6231-8296427
Website: www.fmipa.unesa.ac.id, email: info_fmipa@unesa.ac.id

Master Program of Mathematics Education

Module Handbook

Module Name:	Mathematical Literacy
Module Level:	Master (S-2)
Abbreviation, if applicable:	
Sub-heading, if applicable:	-
Course included in the module, if applicable:	-
Semester/term:	1/First year
Module Coordinator(s):	Dr. Endah Budi Rahaju, M.Pd.
Lecturer(s):	1. Dr. Endah Budi Rahaju, M.Pd. 2. Dr. Pradnyo Wijayanti, M.Pd.
Language:	Indonesian
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. $3 \times 240 \text{ minutes} = 720 \text{ minutes} = 12 \text{ hours lectures}$
Workload:	15 weeks per semester consisting of: <ul style="list-style-type: none">• 1 hour lecture ($1 \times 50 \text{ minutes}$) per week,• 2 hours assignments ($2 \times 45 \text{ minutes}$) per week,• 2 hours individual study ($2 \times 50 \text{ minutes}$) per week, Total workload: $14 \times 2 \times 240 \text{ minutes} = 6,720 \text{ minutes} \approx 4.48 \text{ ECTS}^*$
Credit Point:	2
Requirements:	N/A



<p>Learning outcomes:</p>	<p>Knowledge (KNO-2) CLO-1: able to demonstrate the knowledge of mathematical literacy</p> <p>Skill (SKI-2) CLO-2: able to design assessments that measure mathematical literacy</p> <p>Competency (COM-1) CLO-3: able to work on and present mathematical literacy problems</p> <p>Social (SOC-1) CLO-4: able to collaborate and be responsible professionally and ethically in completing mathematical literacy tasks</p>																														
<p>Content:</p>	<p>Studying philosophies, concepts, and principles of mathematical literacy, frameworks of PISA and TIMSS; the link between mathematical literacy and AKM (Minimum Competency Assessment), applications of mathematical literacy in mathematics learning, and the development of mathematical literacy questions</p>																														
<p>Study/exam achievements</p>	<ul style="list-style-type: none"> • 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 border="1" data-bbox="619 1473 1268 1921"> <thead> <tr> <th>Index</th> <th>Converted Score</th> <th>Score Range</th> </tr> </thead> <tbody> <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> </tbody> </table> 	Index	Converted Score	Score Range	A	4.00	$85 \leq A \leq 100$	A-	3.75	$80 \leq A- < 85$	B+	3.50	$75 \leq B+ < 80$	B	3.00	$70 \leq B < 75$	B-	2.75	$65 \leq B- < 70$	C+	2.50	$60 \leq C+ < 65$	C	2.00	$55 \leq C < 60$	D	1.00	$40 \leq D < 55$	E	0.00	$0 \leq E < 40$
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<p>Media employed</p>	<p>Slides and LCD projectors, white board</p>																														
<p>Reading list</p>	<p>[1] Stacy, K. (2015). <i>Assessing Mathematical Literacy</i>. Springer International Publishing Switzerland.</p>																														



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	<p>[2] Solomon, Y. (2008). <i>Mathematical Literacy</i>. Routledge.</p> <p>[3] Wyatt-Smith, C., Elkins, J., & Gunn, S. (2011). <i>Multiple Perspectives on Difficulties in Learning Literacy and Numeracy</i>. Springer.</p> <p>[4] Solomon, Y. (2009). <i>Mathematical Literacy-Developing Identities of Inclusion</i>. Routledge.</p>
Note	<p>*Total hours per 1 credit in 1 semester = $\{(1 \text{ credit} \times 240 \text{ minutes} \times 14 \text{ weeks})/60 \text{ minutes}\} = 56 \text{ hours}$.</p> <p>Each ECTS equals 25 hours, so 1 credit in 1 semester is equivalent to 2.24 ECTS.</p>
Last amendment	January 2023