



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:	Ethnomathematics
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):	Prof. Dr. Mega Teguh Budiarto, M.Pd.
Lecturer(s):	Prof. Dr. Mega Teguh Budiarto, M.Pd. 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: <ul style="list-style-type: none"> • 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: $14 \times 2 \times 240$ minutes = 6,720 minutes \approx 4.48 ECTS*
Credit Point:	2
Requirements:	N/A
Learning Goals :	<p>Knowledge (KNO-2) CLO-1: able to use information technology and artifacts to study Indonesian cultural ethnomathematics.</p> <p>Skill (SKI-2) CLO-2: able to have knowledge of the concept of integration of mathematics and culture, especially Indonesian culture and creatively develop culture-based contextual or realistic mathematics learning.</p> <p>Competency (COM-1)</p>



	<p>CLO-3: able to Make strategic decisions in completing assignments and designing culture-based mathematics learning strategies.</p> <p>Social (SOC-1)</p> <p>CLO-4: able to be responsible and characterized by faith, intelligent, independent, honest, caring, and tough in completing tasks related to strengthening ethnomathematics concepts and creative application</p>																														
Content:	<p>Studying the concept of ethnomathematics, the integration of culture and mathematics, the use of culture or traditions in Indonesia which have ethnomathematics values, the study of various recent articles on ethnomathematics, and their use in designing mathematics learning.</p>																														
Study/exam achievements	<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="620 1160 1273 1603"> <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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Media employed	<p>Slides and LCD projectors, white board</p>																														
Reading list	<p>[1] Abbas, S. A. (2000). Ethnomathematics and teaching of mathematics in primary schools: a new perspective. Kano Studies, 1(1), 135–144.</p> <p>[2] Abdullah, A. S. (2017). Ethnomathematics in perspective of sundanese culture. Journal on Mathematics Education, 8(1), 1– 16.</p> <p>[3] Ascher, M. (1991). Ethnomathematics: a multicultural view of mathematical ideas. Cole Publishing Company, California.</p> <p>[4] Ascher, M., & Ascher, R. (1986). Ethnomathematics. History of Science, 24(2), 125–144</p>																														



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	[6] Barton. (1985). Ethnomathematics and curriculum change. Unpublished Manuscript.
Note	*Total hours per 1 credit in 1 semester = $\{(1 \text{ credit} \times 240 \text{ minutes} \times 14 \text{ weeks})/60 \text{ minutes}\} = 56 \text{ hours}$. Each ECTS equals 25 hours, so 1 credit in 1 semester is equivalent to 2.24 ECTS.
Last amendment	January 2023