



MINISTRY OF EDUCATION, CULTURE, RESEARCH, AND TECHNOLOGY

UNIVERSITAS SRIWIJAYA

FACULTY OF TEACHER TRAINING AND EDUCATION

MATHEMATICS EDUCATION STUDY PROGRAM

Jl. Raya Palembang – Prabumulih Km.32, Indralaya Ogan Ilir 30662 Website: Fkip.unsri.ac.id

Doctoral Program in Mathematics Education

**MODULE HANDBOOK**

Module designation	:	Learning Design in PMRI/ GMA7101
Module level, if applicable	:	Doctor
Code	:	GMA7101
Subheading, if applicable	:	-
Class, if applicable	:	1.3
Semester	:	1 <sup>st</sup> /odd
Module coordinator	:	Prof. Dr. Zulkardi, M.I. Komp., M.Sc.
Lecturer(s)	:	Prof. Dr. Zulkardi, M.I. Komp., M.Sc. Prof. Dr. Ratu Ilma Indra Putri, M.Si. Dr. Ely Susanti, M.Pd. Dr. Duano Sapta Nusantara Dr. Michiel Doorman
Language	:	English
Relation to the curriculum	:	Study Program Compulsory Course
Teaching format/ class hours per week during the semester	:	Teaching format: lectures, tutorial assignment, and individual study 3 x 300 minutes = 900 minutes = 15 hours
Workload	:	14 weeks per semester consisting of: <ul style="list-style-type: none"> <li>➤ 1 hour lecture (1 x 50 minutes) per week,</li> <li>➤ 2 hours assignments (2 x 50 minutes) per week,</li> <li>➤ 2 hours individual study (2 x 75 minutes) per week,</li> </ul> Total workload: 14x3x300 minutes=12,600 minutes= 8.4 ECTS*
Credit points	:	3 (8.4 ECTS)
Prerequisite's course(s)	:	-
Course Outcomes	:	After taking this course, students should be: CO-1: able to design innovative and original instructional material prototype using instructional theory in RME CO-2: able to implement mathematics learning designs using instructional theory RME at school or university CO-3: able to present and discuss the result of implementation of mathematics learning designs using the RME theory CO-4: able to write paper/ article related to the development and implementation of mathematics learning design using the RME theory



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Content	: Study of Learning design in Realistic Mathematics Education concept using philosophy, principles, and characteristics of RME, articles or research reports related to RME, context, content, and competences in RME, models in RME, and design learning using RME.																		
Study/ exam achievement	: <ul style="list-style-type: none"> <li>➤ 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 56 or C.</li> <li>➤ It is expected that students attend 80% of the total meetings in the modules.</li> <li>➤ 35% midterm exam + 15% assignments + 10% participation + 40% final exam.</li> <li>➤ Final index is defined as follow: The total score is converted into a qualitative score,</li> </ul> <table border="1" data-bbox="574 961 1187 1234"> <thead> <tr> <th>Total Score</th> <th>Grade</th> <th>Description</th> </tr> </thead> <tbody> <tr> <td>86 – 100</td> <td>A</td> <td>Excellent</td> </tr> <tr> <td>71 – 85.99</td> <td>B</td> <td>Good</td> </tr> <tr> <td>56 – 70.99</td> <td>C</td> <td>Fair</td> </tr> <tr> <td>41 – 55.99</td> <td>D</td> <td>Bad</td> </tr> <tr> <td>0 – 40.99</td> <td>E</td> <td>Worse</td> </tr> </tbody> </table>	Total Score	Grade	Description	86 – 100	A	Excellent	71 – 85.99	B	Good	56 – 70.99	C	Fair	41 – 55.99	D	Bad	0 – 40.99	E	Worse
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Forms of media literature	: <ol style="list-style-type: none"> <li>1. Heuvel-panhuizen, M. Van Den, Drijvers, P., Education, M., Sciences, B., &amp; Goffree, F. (2014). Realistic Mathematics Education. In Encyclopedia of Mathematics Education (pp. 521–532). <a href="https://doi.org/10.1007/978-94-007-4978-8">https://doi.org/10.1007/978-94-007-4978-8</a></li> <li>2. Vos, P. (2020). Task Contexts in Dutch Mathematics Education. 31–53. <a href="https://doi.org/10.1007/978-3-030-33824-4_3">https://doi.org/10.1007/978-3-030-33824-4_3</a></li> <li>3. Wijers, M., &amp; de Haan, D. (2020). Mathematics in Teams—Developing Thinking Skills in Mathematics Education. <a href="https://doi.org/10.1007/978-3-030-33824-4_2">https://doi.org/10.1007/978-3-030-33824-4_2</a></li> <li>4. Zulkardi. (2002). Developing A Learning Environment on Realistics Mathematics Education for Indonesian Students Teacher. University of Twente.</li> <li>5. Zulkardi, Z., Putri, R. I. I., &amp; Wijaya, A. (2020). Two Decades of Realistic Mathematics Education in Indonesia. In International Reflection on the Netherland Didactic of</li> </ol>																		



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		Mathematics (pp. 325–340). <a href="https://doi.org/10.1007/978-3-030-20223-1_18">https://doi.org/10.1007/978-3-030-20223-1_18</a>
Note	:	*Total hours per 1 credit in 1 semester = $\{(1 \text{ credit} \times 300 \text{ minutes} \times 14 \text{ weeks}) / 60 \text{ minutes}\} = 70 \text{ hours}$ . Each ECTS equals 25 hours therefore 1 credit in 1 semester equals 2.8 ECTS.

### PLO and CO Mapping

	PLO1	PLO2	PLO3	PLO4	PLO5	PLO6	PLO7	PLO8	PLO9
CO1		✓	✓						
CO2			✓	✓					
CO3			✓	✓					
CO4			✓	✓					