MODULE HANDBOOK

Master Program in Mathematics Education

Faculty of Teacher Training and Education

SRIWIJAYA UNIVERSITY

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

Master Program in Mathematics Education **MODULE HANDBOOK**

Module designation	:	ICT in Mathematics Learning / GIP5101
Semester	:	3rd (third)) / even
Person responsible for the module	:	Dr. Hapizah, M.T Dr. Budi Mulyono, M.Sc.
Language	:	Indonesian and English
Relation to the curriculum	:	Elective Course
Teaching methods	:	• Lecturers: Expository (Week 1 - 2) • Presentation and structured assignment (Week 3 - 7 and Week 9 - 14) • Projects (Week 15 - 16)
Workload	:	14 weeks per semester excluding mid-term and final exams. 1 sks per week = 270 minutes, consisting of 50 minutes synchronous learning + 100 minutes asynchronous learning + 120 minutes systematic project. 270 minutes × 3 sks = 810 minutes = 13.5 hours per week 14 weeks × 13.5 hours = 189 hours 189 hours : 25 hours (1 ECTS) = 7.56 ECTS
Credit points	:	3 SKS = 3 × 2.52 ECTS = 7.56 ECTS
Prerequisite's course(s)	:	-
Module objectives	:	After taking this course, students have the ability to: CO 1: Demonstrate discipline, collaboration, and maintain academic ethics in completing assigned tasks. CO 2: Develop knowledge about the role of ICT in mathematics learning. CO 3: Develop knowledge of ICT and its relevance to the characteristics of students and 21st-century skills. CO 4: Design ICT-based tools to address mathematics learning problems. CO 5: Design ICT-based tools to enhance 21st-century skills. CO 6: Use ICT-based applications to support mathematics learning.
Content	:	This course discusses: 1. ICT in Mathematics Education. 2. Use of Computers in Exams (UTBK). 3. Tools in Distance Learning (PJJ). 4. Digital Teaching Materials.

<table>
<tr><td></td><td></td><td>5. Compiling Development Results Articles.</td></tr>
<tr><td>Examination forms</td><td>:</td><td>Examination in this course includes:
1. Affective (actively participating during classroom processes and responsible for doing assignments)
2. Assignments
3. Mid-term test in the 8th meeting
4. Project</td></tr>
<tr><td>Study and examination requirements</td><td>:</td><td>It is expected that students attend 80% of the total meetings in the modules.

Total Score = 25% of Affective and Assignment + 35% of Midterm + 40% of End-of-semester exams

The total score is converted into a qualitative score,
<table>
<tr><th>Total Score</th><th>Grade</th><th>Description</th></tr>
<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>
</table>

To successfully pass the module, the minimum grade required is C.</td></tr>
<tr><td>Reading lists</td><td>:</td><td>1. Drijvers, P. (2015). Digital technology in mathematics education: Why it works (or doesn’t). Selected regular lectures from the 12th international congress on mathematical education (pp. 135-151). Springer, Cham.
2. Rahmawati, N. I. (2018, February). Pemanfaatan ICT dalam Meningkatkan Kemampuan Literasi Matematika. In PRISMA, Prosiding Seminar Nasional Matematika (Vol. 1, pp. 381-387).
3. Zulkardi, Z., & Putri, R. I. I. (2010). Pengembangan blog support untuk membantu siswa dan guru matematika Indonesia belajar pendidikan matematika realistic Indonesia (PMRI). Jurnal inovasi perekayasa pendidikan (JIPP), 2(1), 1-24.
4. Komar, S., Mulyono, B., & Hapizah, H. (2022). Desain Aplikasi Pembelajaran Matematika Berbasis Geogebra Pada</td></tr>
</table>

		Materi Transformasi Dengan Konteks Kearifan Lokal Palembang. *AKSIOMA: Jurnal Program Studi Pendidikan Matematika*, *11*(4), 3139-3149. 5. Mulyono, B., Sukma, Y., Darmawijoyo., Hapizah., Sari, N. (2023). Pendampingan Perancangan Media Pembelajaran Matematika Untuk Mendukung Computational Thinking Peserta Didik Bagi Guru-Guru Matematika Kota Kayuagung. *Journal Of Sriwijaya Community Service On Education (JSCSE)*, *2*(2), 51-60. 6. Hapizah, H., Mulyono, B., Susanti, E., & FS, C. A. (2022). Constraints of Blended Learning Implementation in Higher Education. *Jurnal Gantang*, *7*(2), 115-120.

PLO and CO mapping

	PLO1	PLO2	PLO3	PLO4	PLO5	PLO6	PLO7	PLO8
CO1	√							
CO2			√					
CO3			√					
CO4						√		
CO5						√		
CO6								√

PLO	CO
PLO 1 Able to take responsibility, discipline, and collaborate professionally and ethically in completing mathematics education tasks	CO 1 Demonstrate discipline, collaboration, and maintain academic ethics in completing assigned tasks.
PLO 3 Master pedagogical and didactic theory, and assessment in mathematics education	CO 2 Develop knowledge about the role of ICT in mathematics learning.
	CO 3 Develop knowledge of ICT and its relevance to the characteristics of students and 21st-century skills.
PLO 6 Able to solve a variety of mathematics education challenges using an inter and/or multidisciplinary approach	CO 4 Design ICT-based tools to address mathematics learning problems.
	CO 5

PLO	CO
	Design ICT-based tools to enhance 21st-century skills.
PLO 8 Able to apply technology in mathematics education	CO 6 Use ICT-based applications to support mathematics learning.