



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](http://www.fmipa.unesa.ac.id), email: [info\\_fmipa@unesa.ac.id](mailto:info_fmipa@unesa.ac.id)

**Master Program of Mathematics Education**

**Module Handbook**

<b>Module Name:</b>	Development of Instructional Media
<b>Module Level:</b>	Master (S-2)
<b>Abbreviation, if applicable:</b>	
<b>Sub-heading, if applicable:</b>	-
<b>Course included in the module, if applicable:</b>	-
<b>Semester/term:</b>	2 <sup>nd</sup> / First year
<b>Module Coordinator(s):</b>	Dr. Siti Khabibah, M.Pd.
<b>Lecturer(s):</b>	1. Dr. Siti Khabibah, M.Pd. 2. Dr. Janet T Manoy, M.Pd. 3. Dr. Atik Wintarti, M.Kom. 4. Dr. Elly M Imah, M.Kom.
<b>Language:</b>	Indonesian
<b>Classification within the curriculum:</b>	Compulsory course / <del>elective studies</del>
<b>Teaching format/class hours per week during the semester</b>	Teaching format: lectures, tutorial assignment, and individual study. $2 \times 240$ minutes = 480 minutes = 8 hours lectures
<b>Workload:</b>	15 weeks per semester consisting of: <ul style="list-style-type: none"><li>• 1 hour lecture (<math>1 \times 50</math> minutes) per week,</li><li>• 2 hours assignments (<math>2 \times 45</math> minutes) per week,</li><li>• 2 hours individual study (<math>2 \times 50</math> minutes) per week,</li></ul> Total workload: $14 \times 2 \times 240$ minutes = 6,720 minutes = 4.48 ECTS*
<b>Credit Point:</b>	2
<b>Requirements:</b>	N/A



<p><b>Learning Goals :</b></p>	<p><b>Knowledge (KNO-2)</b>            CLO-1: able to understand the concepts, types/classifications, functions, and the basics of developing instructional media            CLO-2: able to integrate Information and Communication Technology (ICT) in learning mathematics as a source and learning media and using it to support the implementation of learning</p> <p><b>Skill (SKI-2)</b>            CLO-3: able to design, select and produce learning media by using the surrounding environment (contextual) and/or ICT-based</p> <p><b>Social (SOC-1)</b>            CLO-4: able to responsible for developing learning media according to mathematical topics that are practical, efficient, and safe for students</p>																														
<p><b>Content:</b></p>	<p>Studying and reviewing concepts, types/classifications, functions, basics of media development, as well as designing, selecting, and producing instructional media by using the surrounding environment (contextual) and ICT. This lecture will be carried out through theoretical presentations, project assignments, presentations and discussions.</p>																														
<p><b>Study/exam achievements</b></p>	<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 55 or C.</li> <li>Final score is calculated as follows:            20% midterm exam + 30% assignments + 20% participation + 30% final exam</li> <li>Final index is defined as follow:           <table border="1" data-bbox="630 1518 1279 1960"> <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><math>85 \leq A \leq 100</math></td> </tr> <tr> <td>A-</td> <td>3.75</td> <td><math>80 \leq A- &lt; 85</math></td> </tr> <tr> <td>B+</td> <td>3.50</td> <td><math>75 \leq B+ &lt; 80</math></td> </tr> <tr> <td>B</td> <td>3.00</td> <td><math>70 \leq B &lt; 75</math></td> </tr> <tr> <td>B-</td> <td>2.75</td> <td><math>65 \leq B- &lt; 70</math></td> </tr> <tr> <td>C+</td> <td>2.50</td> <td><math>60 \leq C+ &lt; 65</math></td> </tr> <tr> <td>C</td> <td>2.00</td> <td><math>55 \leq C &lt; 60</math></td> </tr> <tr> <td>D</td> <td>1.00</td> <td><math>40 \leq D &lt; 55</math></td> </tr> <tr> <td>E</td> <td>0.00</td> <td><math>0 \leq E &lt; 40</math></td> </tr> </tbody> </table> </li> </ul>	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	$0 \leq E < 40$
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	$0 \leq E < 40$																													
<p><b>Media employed</b></p>	<p>Slides and LCD projectors, white board</p>																														
<p><b>Reading list</b></p>	<p>[1]. Kurikulum sekolah</p>																														



	<p>[2]. Buku matematika sekolah, baik buku siswa maupun buku guru</p> <p>[3]. Ivers, K. S. &amp; Barron, A. E. 2009. <i>Multimedia Projects in Education: Designing, Producing, and Assessing</i>. Libraries Unlimited.</p> <p>[4]. Gredler, M. E. 2009. <i>Learning and Instruction: Theory into Practice</i>. Merrill Pearson Education, Inc.</p> <p>[5]. Khabibah, S. 2021. <i>Pengembangan Perangkat Pembelajaran Matematika dengan Pendekatan Saintifik Berbantuan Software Geogebra untuk Materi Transformasi Kelas VII Siswa SMP</i>.</p> <p>[6]. Berbagai jurnal pendidikan terbitan baik luar negeri maupun dalam negeri</p> <p>[7]. Lang-Raad, N. D. &amp; Marzano, R. J. 2019. <i>The New Art and Science of Teaching Mathematics</i>. Solution Tree Press.</p>
<b>Note</b>	<p>*Total hours per 1 credit in 1 semester = <math>\{(1 \text{ credit} \times 240 \text{ minutes} \times 14 \text{ weeks})/60 \text{ minutes}\} = 56 \text{ hours}</math>.</p> <p>Each ECTS equals 25 hours, so 1 credit in 1 semester is equivalent to 2.24 ECTS.</p>
<b>Last amendment</b>	January 2023