Module designation	**Inclusive Mathematics Education** **Indonesian title:** *Pendidikan Matematika Inklusif* **Course code:** 8420202237
Semester(s) in which the module is taught	Semester 8 (Fourth year)
Person responsible for the module	**Coordinator:** Dr. Endah Budi Rahaju, M.Pd. **Teaching staff:** Dr. Endah Budi Rahaju, M.Pd.; Dr. Nia Wahyu Damayanti, M.Pd.; Ika Kurniasari, M.Pd.
Language	Indonesian
Relation to curriculum	Elective
Teaching methods	Lectures using project-based learning, case studies, collaborative discussions, analysis of inclusive education policies, workshops for adaptive mathematics lesson modules, instructional media design, microteaching, peer review, and reflection. Class workload per week: 2 × 170 minutes = 340 minutes (5.67 hours), of which 2 × 50 minutes are contact lectures. **Media and tools:** Slides, LCD projector, UNESA LMS (SiDia), Google Docs/Slides/Forms, Canva, Microsoft Word, PDF guidelines, laptops, smartphones, and tactile mathematics learning aids.
Workload (incl. contact hours, self-study hours)	**(Estimated) total workload:** 2 CU × 170 minutes × 16 weeks = 5,440 minutes = 90.67 hours (≈ 3.18 ECTS) **Contact hours:** lectures, 2 × 50 minutes per week × 16 weeks = 26.67 hours (class hours per week: 340 minutes = 5.67 hours, including structured activities) **Private study including examination preparation:** structured assignments, 2 × 60 minutes per week × 16 weeks = 32.00 hours; independent study, 2 × 60 minutes per week × 16 weeks = 32.00 hours (total 64.00 hours)
Credit points	2 CU (3.18 ECTS) *1 CU = 170 minutes per week × 16 weeks = 45.3 hours; 1 ECTS = 28.48 hours (144 CU = 229 ECTS), so 1 CU = 1.59 ECTS (UNESA Rector's Decree No. 736/HK/KM/2023).*
Required and recommended prerequisites for joining the module	None
Module objectives/intended learning outcomes	**Programme learning outcomes (PLO) addressed:** • PLO-5: Apply the basic principles of mathematics to solve simple mathematical problems. • PLO-7: Demonstrate pedagogical knowledge in designing, implementing and evaluating mathematics learning. • PLO-8: Design, implement and evaluate mathematics learning using IT. **Course learning outcomes (CLO): after completing this module, students are able to:** • CLO-1: Demonstrate inclusive, adaptive, and collaborative attitudes toward learner diversity in mathematics education. (PLO-5) • CLO-2: Analyze pedagogical theories and strategies to support inclusive mathematics learning in curriculum- and technology-rich

<table>
<tr><td></td><td>contexts. (PLO-7)
• CLO-3: Design, implement, evaluate, and refine inclusive mathematics instruction that addresses diverse learning needs, including those of learners with disabilities. (PLO-</td></tr>
<tr><td>Content</td><td>The course examines concepts, principles, policies, and classroom practices of inclusive mathematics education. Students analyze the diverse characteristics and learning needs of students, including learners with disabilities; inclusive pedagogical approaches and differentiation; adaptation of mathematics teaching models and strategies; accessible instructional media and technology; and inclusive assessment. Using project-based learning, students progressively design an inclusive mathematics lesson module with differentiated content, processes, and products; develop inclusive assessment instruments; analyze classroom cases; conduct microteaching; evaluate their instructional practice; and revise and present a complete, applicable inclusive mathematics teaching module informed by peer and lecturer feedback.</td></tr>
<tr><td>Examination forms</td><td>Final score is calculated from the weekly assessment scheme below (CLO/PLO addressed and weight of each assessment):
<table>
<tr><th>Week</th><th>CLO</th><th>PLO</th><th>Weight (%)</th></tr>
<tr><td>1</td><td>CLO-1</td><td>PLO-5</td><td>4</td></tr>
<tr><td>2</td><td>CLO-2</td><td>PLO-7</td><td>4</td></tr>
<tr><td>3</td><td>CLO-1</td><td>PLO-5</td><td>4</td></tr>
<tr><td>4</td><td>CLO-2</td><td>PLO-7</td><td>8</td></tr>
<tr><td>5</td><td>CLO-2</td><td>PLO-7</td><td>8</td></tr>
<tr><td>6</td><td>CLO-2</td><td>PLO-7</td><td>8</td></tr>
<tr><td>7</td><td>CLO-3</td><td>PLO-8</td><td>8</td></tr>
<tr><td>8</td><td>CLO-3</td><td>PLO-8</td><td>4</td></tr>
<tr><td>9</td><td>CLO-2</td><td>PLO-7</td><td>4</td></tr>
<tr><td>10</td><td>CLO-3</td><td>PLO-8</td><td>8</td></tr>
<tr><td>11</td><td>CLO-3</td><td>PLO-8</td><td>8</td></tr>
<tr><td>12</td><td>CLO-3</td><td>PLO-8</td><td>4</td></tr>
<tr><td>13</td><td>CLO-3</td><td>PLO-8</td><td>8</td></tr>
<tr><td>14</td><td>CLO-3</td><td>PLO-8</td><td>4</td></tr>
<tr><td>15</td><td>CLO-3</td><td>PLO-8</td><td>4</td></tr>
<tr><td>16</td><td>CLO-3</td><td>PLO-8</td><td>12</td></tr>
</table></td></tr>
<tr><td>Study and examination requirements</td><td>Students are considered competent and pass if the final score is at least 55 or C. Assessment includes progressive weekly assignments and inclusive lesson-module development (weeks 1–12: 72%), microteaching, project revision, and presentation (weeks 13–15: 16%), and the final inclusive lesson module and portfolio (week 16: 12%).
Final index (grade conversion):
<table>
<tr><th>Index</th><th>Converted score</th><th>Score range (A = final score)</th></tr>
<tr><td>A</td><td>4.00</td><td>85 ≤ A ≤ 100</td></tr>
<tr><td>A-</td><td>3.75</td><td>80 ≤ A < 85</td></tr>
<tr><td>B+</td><td>3.50</td><td>75 ≤ A < 80</td></tr>
<tr><td>B</td><td>3.00</td><td>70 ≤ A < 75</td></tr>
</table></td></tr>
</table>

	B- | 2.75 | 65 ≤ A < 70 C+ | 2.50 | 60 ≤ A < 65 C | 2.00 | 55 ≤ A < 60 D | 1.00 | 40 ≤ A < 55 E | 0.00 | 0 ≤ A < 40
Reading list	1. Badan Standar, Kurikulum, dan Asesmen Pendidikan. (2022). Panduan pelaksanaan pendidikan inklusif . Kementerian Pendidikan, Kebudayaan, Riset, dan Teknologi. 2. Barkatsas, A. N., Gialamas, V., & Kasimatis, H. (2015). Diversity in mathematics education . Springer. https://doi.org/10.1007/978-3-319-05978-5 3. Diezmann, C. M., & Lowrie, T. (2009). Teaching mathematics to low attainers: Inclusive practices in the middle years . Springer. https://doi.org/10.1007/978-1-4020-9902-7 4. Jorgensen, R., & Sullivan, P. (Eds.). (2016). Teaching mathematics in diverse classrooms: Promoting equity and inclusion . Springer. 5. Kollosche, D., Marcone, R., Knigge, M., Penteado, M. G., & Skovsmose, O. (Eds.). (2019). Inclusive mathematics education: State-of-the-art research from Brazil and Germany . Springer. https://doi.org/10.1007/978-3-030-11518- 0 6. Moschkovich, J. (2010). Language and mathematics education: Multiple perspectives and directions for research . Springer. 7. Tomlinson, C. A. (2017). How to differentiate instruction in academically diverse classrooms (3rd ed.). ASCD.