| | |
|---|---|
| Module designation | **School Mathematics**<br>**Indonesian title:** *Matematika Sekolah*<br>**Course code:** 8420203111 |
| Semester(s) in which the module is taught | Semester 3 (Second year) |
| Person responsible for the module | **Coordinator:** Prof. Dr. Masriyah, M.Pd.<br>**Teaching staff:** Prof. Dr. Masriyah, M.Pd.; Dr. Endah Budi Rahaju, M.Pd.; Dr. Siti Khabibah, M.Pd.; Dr. Abdul Haris Rosyidi, S.Pd., M.Pd.; Dr. Lestariningsih, S.Pd., M.Pd.; Dr. Ali Shodikin, S.Pd., M.Pd.; Dr. Nonik Indrawatiningsih, M.Pd. |
| Language | Indonesian |
| Relation to curriculum | Compulsory |
| Teaching methods | Lectures, tutorial assignments, and individual study<br>**Media and tools:** Slides and LCD projectors, whiteboard |
| Workload (incl. contact hours, self-study hours) | **(Estimated) total workload:** 3 CU × 170 minutes × 16 weeks = 8,160 minutes = 136.00 hours (≈ 4.77 ECTS)<br>**Contact hours:** lectures, 3 × 50 minutes per week × 16 weeks = 40.00 hours (class hours per week: 510 minutes = 8.50 hours, including structured activities)<br>**Private study including examination preparation:** structured assignments, 3 × 60 minutes per week × 16 weeks = 48.00 hours; independent study, 3 × 60 minutes per week × 16 weeks = 48.00 hours (total 96.00 hours) |
| Credit points | 3 CU (4.77 ECTS)<br>*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 | Foundations of Mathematics and |
| Module objectives/intended learning outcomes | **Programme learning outcomes (PLO) addressed:**<br>• PLO-2: Demonstrate a resilient, collaborative, adaptive, innovative, inclusive, lifelong learning, and entrepreneurial character.<br>• PLO-3: Develop logical, critical, systematic and creative thinking in carrying out specific work in the field of expertise and in accordance with the work competency standards in the relevant field.<br>• PLO-8: Design, implement and evaluate mathematics learning using IT.<br>• PLO-10: Make decisions based on data/information in completing tasks that are the student's responsibility and evaluating the work that has been done.<br>• PLO-11: Communicate ideas and research results effectively, orally, and in writing. |
| Content | Reviewing the essential concepts of Mathematics in Junior High School/Islamic Junior High School, and Senior High School/Islamic Senior High School Mathematics, student and/or teacher misconceptions and learning alternatives that utilize ICT through active, collaborative and reflective learning |

**Examination forms**

Final score is calculated from the weekly assessment scheme below (CLO/PLO addressed and weight of each assessment):

| Week | CLO | PLO | Weight (%) |
|---|---|---|---|
| 1 | CLO-1 | PLO-2 | 5 |
| 2 | CLO -1 | PLO-3 | 10 |
| 3 | CLO -2 | PLO-3 | 5 |
| 4 | CLO -4 | PLO-8 | 5 |
| 5 | CLO -3 | PLO-10 | 5 |
| 6 | CLO -5 | PLO-11 | 5 |
| 7 | CLO -2 | PLO-8 | 10 |
| 8 | CLO -5 | PLO-10 | 10 |
| 9 | CLO -3 | PLO-8 | 5 |
| 10 | CLO -5 | PLO-11 | 5 |
| 11 | CLO -3 | PLO-8 | 5 |
| 12 | CLO -3 | PLO-10 | 5 |
| 13 | CLO -2 | PLO-11 | 5 |
| 14 | CLO -5 | PLO-2 | 5 |
| 15 | CLO -3 | PLO-8 | 5 |
| 16 | CLO -3 | PLO-11 | 10 |

**Study and examination requirements**

Students are considered competent and pass if the final score is at least 55 or C.

**Final index (grade conversion):**

| Index | Converted score | Score range (A = final score) |
|---|---|---|
| A | 4.00 | 85 ≤ A ≤ 100 |
| A- | 3.75 | 80 ≤ A < 85 |
| B+ | 3.50 | 75 ≤ A < 80 |
| B | 3.00 | 70 ≤ A < 75 |
| 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. Sultan Alan, Artzt, Alice F. 2011. The Mathematics That Every Secondary Scool Math Teacher Need To Know . New York: Routledge
2. Van de Walle, John A. Karen S. Karp, Jennifer M. Bay- Williams. 2013. Elementary and Middle School Mathematics, Teaching Developmentally, Eight Edition . USA: Pearson Education
3. Sonnabend, Thomas. 2010. Mathematics for Teachers: An Interactive Approach for Grade K-8, Fourth Edition. USA: Brooks/Cole, USA: Brooks/Cole, Cengage Learning
4. Yee Lee Peng. 2006. Teaching Secondary School Mathematics, A Resource Book . Singapore : Mc Graw Hill
5. Buku-buku Matematika SMP/MTs yang relevan dengan kurikulum

| | |
|---|---|
| | yang berlaku<br>6. Buku-buku Matematika SMA/MA yang relevan dengan kurikulum yang berlaku. |