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| Module designation | <i>Wawasan dan Kajian MIPA</i> |
| Semester(s) in which the module is taught | 4 |
| Person responsible for the module | <i>Husna Arifah, M.Sc</i> |
| Language | <i>Bahasa Indonesia</i> |
| Relation to curriculum | <i>Compulsory course</i> |
| Teaching methods | <i>100 minutes lectures and 120 minutes structured activities per week.</i> |
| Workload (incl. contact hours, self-study hours) | <i>Total workload is 136 hours per semester which consists of 150 minutes lectures, 180 minutes structured activities, and 180 minutes self-study per week for 16 weeks.</i> |
| Credit points | 2 |
| Required and recommended prerequisites for joining the module | - |
| Module objectives/intended learning outcomes | <p><i>1 Respecting cultural, religious, and belief diversity, as well as diversity of opinion, and contributing to social, national, and state life based on Pancasila</i></p> <p><i>2 Demonstrating a responsible attitude in integrating MIPA insights into daily life</i></p> <p><i>3 Demonstrating a responsible attitude in using scientific methods to solve problems in MIPA</i></p> <p><i>4 Demonstrate a rational attitude in mathematics by using correct logic and reasoning</i></p> |
| Content | <p><i>This course discusses basic MIPA methods (scientific methods) in problem solving and ways/techniques of drawing conclusions based on correct reasoning (mathematical logic) rules.</i></p> <p><i>This study also covers basic science concepts and their latest developments. Learning Process</i></p> <p><i>The Science Insight and Study lecture is conducted in a contextual, integrative, and interactive manner, with a student-centered approach.</i></p> |
| Examination forms | <i>CO1: Attitude assessment is carried out at each meeting by observation and / or self-assessment techniques using the assumption that basically every student has a good attitude.</i> |

| Study and examination requirements | <p>The student is given a value of very good or not good attitude if they show it significantly compared to other students in general. The result of attitude assessment is not a component of the final grades, but as one of the requirements to pass the course. Students will pass from this course if at least have a good attitude.</p> <p>The final mark will be weight as follow:</p> <table><tr><th>No</th><th>CO</th><th>Assessment Object</th><th>Assessment Technique</th><th>Weight</th></tr><tr><td>1</td><td>CO 1</td><td>a. Presentation b. Discussion</td><td>Observation</td><td>5% 10%</td></tr><tr><td>2</td><td>CO 2, CO 3, CO 4</td><td>a. Individual assignment b. Group assignment c. Quiz d. Midterm e. Final test</td><td>Written</td><td>10% 10% 20% 25%</td></tr><tr><td colspan="4">Total</td><td>100%</td></tr></table> | No | CO | Assessment Object | Assessment Technique | Weight | 1 | CO 1 | a. Presentation b. Discussion | Observation | 5% 10% | 2 | CO 2, CO 3, CO 4 | a. Individual assignment b. Group assignment c. Quiz d. Midterm e. Final test | Written | 10% 10% 20% 25% | Total | | | | 100% |
|------------------------------------|---|---|----------------------|--------------------------|----------------------|--------|---|------|----------------------------------|-------------|-----------|---|------------------|---|---------|--------------------------|-------|--|--|--|------|
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| 2 | CO 2, CO 3, CO 4 | a. Individual assignment b. Group assignment c. Quiz d. Midterm e. Final test | Written | 10% 10% 20% 25% | | | | | | | | | | | | | | | | | |
| Total | | | | 100% | | | | | | | | | | | | | | | | | |
| Reading list | <p>1. Jujun S. Suriasumantri. (2007). <i>Filsafat Ilmu Sebuah Pengantar Populer</i>. Jakarta: Pustaka Sinar Harapan</p> <p>2. Peter Soedoyo. (2004). <i>Pengantar Sejarah dan Filsafat Ilmu Pengetahuan Alam</i>. Yogyakarta: Gadjah Mada University Press.</p> <p>3. Sukirman, 2006. <i>Logika dan Himpunan</i>. Yogyakarta: Hanggar Kreator</p> <p>4. Tarski, Alfred. 1994. <i>Introduction to Logic and to the Methodology of Deductive Sciences</i>. New York : Oxford University Press</p> <p>5. H 'Arifah, D Lestari and E R Sari(2019), <i>Stability analysis of endemic equilibrium points on cancer cells mathematical model</i></p> | | | | | | | | | | | | | | | | | | | | |