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| Module designation | Philosophy of Science |
| Semester(s) in which the module is taught | Odd/3 rd |
| Person responsible for the module | Paramita Cahyaningrum Kuswandi S.P., M.Sc., Ph.D., Rizka Apriani Putri S.Si., M.Sc. |
| Language | Bahasa Indonesia |
| Relation to curriculum | Compulsory |
| Teaching methods | Lecture, lesson, project, seminar, exam |
| Workload (incl. contact hours, self-study hours) | Total workload is 91 hours per semester which consists of 100 minutes lectures, 120 minutes structured activities, and 120 minutes individual study per week for 16 weeks. |
| Credit points | 2 SKS (3.2 ECTS) |
| Required and recommended prerequisites for joining the module | - |
| Module objectives/intended learning outcomes | PLO 1 PLO 2 PLO 5 PLO 7 |
| Content | This course discusses what science is, the sources of science, scientific methods, scientific works, scientific attitudes, the sources of truth and the limitations of science, as well as the role of science and technology in the development of human civilization. This course trains students to think logically, critically, comprehensively, and contemplatively so that they can understand the interrelationship between the past, present, and future in the development of science and technology. Students learn about positivistic and postpositivistic philosophy and its application in natural science research. Students also learn about the role of scientists in the development of science, education, and culture. |
| Examination forms | Presence, task, mid semester exam, final semester exam, case study, team based project. |

| Study and examination requirements | <p>The final mark will be weight as follow:</p> <table><tr><th>NO</th><th>Assessment Techniques</th><th>Percentage Weight Assessment (%)</th><th>Information</th></tr><tr><td rowspan="5">1</td><td>Cognitive</td><td>50</td><td>Maximum assessment weight accumulation 50%</td></tr><tr><td>Presence</td><td>5</td><td></td></tr><tr><td>Task</td><td>10</td><td></td></tr><tr><td>Mid Semester Exam</td><td>15</td><td></td></tr><tr><td>Final Semester Exam</td><td>20</td><td></td></tr><tr><td rowspan="3">2</td><td>Participatory</td><td>50</td><td>Maximum assessment weight accumulation 50%</td></tr><tr><td>Case Study</td><td>25</td><td></td></tr><tr><td>Team Based Project</td><td>25</td><td></td></tr><tr><td></td><td>Total</td><td>100</td><td></td></tr></table> | NO | Assessment Techniques | Percentage Weight Assessment (%) | Information | 1 | Cognitive | 50 | Maximum assessment weight accumulation 50% | Presence | 5 | | Task | 10 | | Mid Semester Exam | 15 | | Final Semester Exam | 20 | | 2 | Participatory | 50 | Maximum assessment weight accumulation 50% | Case Study | 25 | | Team Based Project | 25 | | | Total | 100 | |
|------------------------------------|--|----------------------------------|--|----------------------------------|-------------|---|-----------|----|--|----------|---|--|------|----|--|-------------------|----|--|---------------------|----|--|---|---------------|----|--|------------|----|--|--------------------|----|--|--|--------------|------------|--|
| NO | Assessment Techniques | Percentage Weight Assessment (%) | Information | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 1 | Cognitive | 50 | Maximum assessment weight accumulation 50% | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | Presence | 5 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | Task | 10 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | Mid Semester Exam | 15 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | Final Semester Exam | 20 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 2 | Participatory | 50 | Maximum assessment weight accumulation 50% | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | Case Study | 25 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | Team Based Project | 25 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | Total | 100 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Reading list | <p>A. Gie T.L., 2000. Pengantar Filsafat Ilmu. Liberty Yogyakarta</p> <p>B. Noeng Muhadjir. 2011. Filsafat Ilmu: Ontologi, Epistemologi, Aksiologi. Edisi IV. Yogyakarta: Rake Sarasin.</p> <p>C. Zainal Abidin. 2003. Filsafat Manusia: memahami manusia melalui filsafat. Bandung: PT. Remaja Rosda karya.</p> <p>D. Tim Dosen Filsafat Ilmu Fakultas Filsafat UGM. 2002. Filsafat Ilmu Sebagai Dasar Pengembangan Ilmu Pengetahuan. Penerbit Liberty Yogyakarta</p> <p>E. Suriasumantri, JS. 2010. Filsafat Ilmu: Sebuah Pengantar Populer. PT Penebar Swadaya</p> <p>F. Kant, Immanuel. 2004. Critique of Practical Reason. Mineola, NY.: Dover Publications, Inc.</p> <p>G. Whitehead, N. Alfred. 2001. Fungsi Rasio. Terjemahan. Yogyakarta: Penerbit Kanisius.</p> | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |