

Module designation	Research Philosophy and Ethics
Semester(s) in which the module is taught	Odd and even semesters
Person responsible for the module	Prof. Ir. Budi Guntoro, S.Pt., M.Sc., Ph.D., IPU., ASEAN Eng. Prof. Dr. Ir. Budi Prasetyo Widyobroto, DEA., DESS., IPU., ASEAN Eng. Prof. Dr. Ir. Nurliyani, M.S., IPM. Dr. Ir. Bambang Suhartanto, DEA., IPU. Prof. Ir. Diah Tri Widayati, MP., Ph.D., IPM.
Language	Bahasa and English
Relation to curriculum	Study Program's Compulsory
Teaching methods	Classical lecture and discussion
Workload (incl. contact hours, self-study hours)	Total workload: 79 hours Contact hours: - Lecture: 23 hours - Academic activity: 28 hours Private study: 28 hours
Credit points	2/0
Required and recommended prerequisites for joining the module	None
Module objectives/intended learning outcomes	<p>Course Outcomes (CO):</p> <ol style="list-style-type: none"> <li>1. Student is able to think philosophically in finding the truth through deduction and induction</li> <li>2. Student does research based on the scientific principle and based on the philosophy science thinking scheme</li> <li>3. Student is able to evaluate the finished or ongoing research based on the research ethics, is able to anticipate plagiarism action, and is able to do the good and the right research</li> </ol> <p>Expected Learning Outcomes:</p> <ul style="list-style-type: none"> <li>- Attitudes and Behaviors:             <ol style="list-style-type: none"> <li>1. Be long life learning with basic character as religious attitudes, humanity, nationalism, tolerance, moderate, respecting in cultural diversity based on National Five Principle of Pancasila. (CO1)</li> <li>2. Be accountable for professional practices that consist of accepting sue for any professional decision and action according to their area's scope and according to the law/regulations. (CO2, CO3)</li> </ol> </li> <li>- Mastery in Sciences:             <ol style="list-style-type: none"> <li>1. Able to master scientific philosophy and develop new science and technology in animal science is useful, competitive, and environmentally sound research with a multidisciplinary approach. (CO1, CO2, CO3)</li> <li>2. Able to develop new science and technology concepts to solve problems in the field of animal husbandry through research with multidisciplinary and transdisciplinary approaches. (CO1, CO2, CO3)</li> </ol> </li> <li>- Special skills:             <ol style="list-style-type: none"> <li>1. Able to develop science and technology through creative, original, and novelty research.( CO1, CO2, CO3)</li> </ol> </li> </ul>

	<ol style="list-style-type: none"> <li>2. Able to independently design and carry out inter-, multi-, and transdisciplinary research for the development of animal husbandry science and technology. (CO1, CO2, CO3)</li> <li>3. Able to manage, lead and develop research in the field of animal husbandry, as well as communicate the results and get recognition at the national and international levels for the benefit of humankind. (CO1, CO2, CO3)</li> </ol> <p>- General skills:</p> <ol style="list-style-type: none"> <li>1. Able to find or develop new theories/concepts/ideas and contribute to the development and practice of science and/or technology by producing scientific research based on scientific methodology, logical, critical, systematic, and creative thinking through interdisciplinary, multidisciplinary, or transdisciplinary approaches, pay attention to and apply human values in their field of expertise. (CO1, CO2, CO3)</li> <li>2. Able to develop a research roadmap to compile scientific, technological, or artistic arguments and solutions based on a critical view of facts, concepts, principles, or theories with an interdisciplinary, multidisciplinary, or transdisciplinary approach, based on a study of the main objectives of the research and their constellation on broader targets. (CO1, CO3)</li> <li>3. Able to communicate the result of reasoning and scientific research in the form of dissertation and scientific writing responsibly based on academic ethics. (CO1, CO3)</li> </ol>																																																		
Content	<p>This course is a study program's compulsory course at doctoral level. This course studies about scientific theories and concepts, induction and deduction arguments, Realism, Relativism, instrumentalism, Positivism dan falsification, Hypothetico-deductive method, Methodological collectivism and individualism, Research on human and animal, Justice dan priorities, Informed consent and its components, Ethical guidelines and ethical review, and the good research practices, deviation from good research practice, and plagiarism</p>																																																		
Exams and assessment formats	<table border="1" style="width: 100%; border-collapse: collapse;"> <thead> <tr> <th style="width: 50%;">Assessment Components</th> <th style="width: 25%;">Course Outcomes (CO)</th> <th style="width: 25%;">Percentage (%)</th> </tr> </thead> <tbody> <tr> <td>1. Midterm exam (written test, paper assignment)</td> <td>CO 1 &amp; CO 2</td> <td>40</td> </tr> <tr> <td>2. Final exam (written test, paper assignment)</td> <td>CO 2 &amp; CO 3</td> <td>30</td> </tr> <tr> <td>3. Presentation</td> <td>CO 1, CO 2 &amp; CO 3</td> <td>30</td> </tr> <tr> <th colspan="4" style="text-align: center;">Grade and Score</th> </tr> <tr> <th style="width: 12.5%;">Grade</th> <th style="width: 12.5%;">Score</th> <th style="width: 12.5%;">Grade</th> <th style="width: 12.5%;">Score</th> </tr> <tr> <td>A</td> <td>≥80</td> <td>C+</td> <td>45-49,9</td> </tr> <tr> <td>A-</td> <td>75-79,9</td> <td>C</td> <td>40-44,9</td> </tr> <tr> <td>A/B</td> <td>70-74,9</td> <td>C-</td> <td>35-39,9</td> </tr> <tr> <td>B+</td> <td>65-69,9</td> <td>C/D</td> <td>30-34,9</td> </tr> <tr> <td>B</td> <td>60-64,9</td> <td>D+</td> <td>25-29,9</td> </tr> <tr> <td>B-</td> <td>55-59,9</td> <td>D</td> <td>20-24,9</td> </tr> <tr> <td>B/C</td> <td>50-54,9</td> <td>E</td> <td>0-19,9</td> </tr> </tbody> </table>			Assessment Components	Course Outcomes (CO)	Percentage (%)	1. Midterm exam (written test, paper assignment)	CO 1 & CO 2	40	2. Final exam (written test, paper assignment)	CO 2 & CO 3	30	3. Presentation	CO 1, CO 2 & CO 3	30	Grade and Score				Grade	Score	Grade	Score	A	≥80	C+	45-49,9	A-	75-79,9	C	40-44,9	A/B	70-74,9	C-	35-39,9	B+	65-69,9	C/D	30-34,9	B	60-64,9	D+	25-29,9	B-	55-59,9	D	20-24,9	B/C	50-54,9	E	0-19,9
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<p>Study and examination requirements</p>	<p>The final grade in the module is composed of 40% performance on Midterm exam, 30% final exam, 30% presentation. Students must have a final grade of 70% or higher to pass</p>
<p>Reading list</p>	<ul style="list-style-type: none"> <li>- Bhaskar, R. 1978. A Realist Theory of Science. Hassocks: Harvester Press.</li> <li>- Bhaskar, R. 1989. Reclaiming Reality: A Critical Introduction to Contemporary Philosophy. London: Verso.</li> <li>- Brunel University London. 2015. Research Ethics handbook: philosophy, history and theory. Revised may 2015 version 1.1</li> <li>- Lakhotia, SC. 2021. Philosophy and Ethics of Research in Science. At <a href="http://www.researchgate.net/publication/351835855">http://www.researchgate.net/publication/351835855</a></li> <li>- Resnik, DB. 2007. What is Ethics in Research and Why Is It Important? at: <a href="http://researchgate.net/publication/242492652">http://researchgate.net/publication/242492652</a>. January 2007</li> <li>- Saunder, MNK. 2009. Understandings research philosophies and approaches. Chapter 4. Available at: <a href="https://www.researchgate.net/publication/309102603">https://www.researchgate.net/publication/309102603</a></li> </ul>