

### Modul Description

<b>Module name</b>	Course Module
<b>Module level, if applicable</b>	Magister of Biology Education
<b>Code, if applicable</b>	30061013
<b>Subtitle, if applicable</b>	-
<b>Course, if applicable</b>	Philosophy of science
<b>Semester(s) in which the module istaught</b>	I
<b>Person responsible for the module</b>	Lecturer of Courses
<b>Lecturer</b>	Dr. Hanum Isfaeni, M.Si, Dr. Rusdi M. Biomed
<b>Language</b>	Indonesian Language [Bahasa Indonesia]
<b>Relation to Curriculum</b>	This course is a mandatory course for Magister of Biology Education and offered in the 1 <sup>st</sup> semester.
<b>Type of teaching, contact hours</b>	<p>Teaching methods used in this course are:</p> <ul style="list-style-type: none"> <li>- Lecture (i.e., group investigation, small group discussion, case study, and video-based learning)</li> <li>- Structured assignments (i.e., essays and case study)</li> </ul> <p>The class size for lecture is 30 students. Contact hours for lecture is 28 hours, assignments are 69 hours</p>
<b>Workload</b>	<p>For this course, students required to meet a minimum of 233.2 hours in one semester, which consist of:</p> <p>32.2 hours for lecture : tutorial and discuss the subject 22.00 hours for structured assignments : doing exercices and problem solving or project, 162.00 hours for independent study : reading references, group discuss, finish the exercises. Project ; 25 hours Paper : 14 hours</p> <p>1 ECTS = 30 hours 233.2 hours = 7.8 ECTS -</p>
<b>Credit points</b>	3 credit points (equivalent with 7,8 ECTS)

<b>Requirements according to the examination regulations</b>	Students must have attended all classes and submitted all class assignments that are scheduled before the final tests.
<b>Recommended prerequisites</b>	Students must have attended all classes and submitted all class assignments that are scheduled before the final tests.
<b>Module objectives/intended learning outcomes</b>	<p>After completing the course and given with this case:  <b>Learning Outcomes</b></p> <p><b>Social Competences:</b></p> <ol style="list-style-type: none"> <li>1. Have integrity and professional ethics, self-development, and make innovations to improve the quality of education and lifelong learning for the community (PLO1)</li> <li>2. Able to apply analytical, critical, innovative, and abstraction thinking skills in the field of biology education (PLO2)</li> </ol> <p><b>Specific Competences:</b></p> <ol style="list-style-type: none"> <li>1. able to analyze the basic philosophy and theory in the study of biology and biology learning philosophical concepts in compiling scientific knowledge (PLO4).</li> <li>2. Able to analyze and synthesize problem solutions in biology learning through interdisciplinary, transdisciplinary and multidisciplinary approaches (PLO10)</li> </ol>

<b>Content</b>	<p><b>Students will learn about:</b></p> <p>The ontological, epistemological and axiological foundations in Biology Education, basic concepts of philosophy of science, philosophy of science and human beings, and their differences from other branches of science..</p>
<b>Forms of Assessment</b>	<p>Assessment is carried out based on written examinations, assessment/evaluation of the learning process and performance with the following components: Project 20%; Structured tasks: 20%; Mid Test: 30%; Final Test: 30%</p>

<b>Study and examination requirements and forms of examination</b>	<b>Study and examination requirements:</b> <ul style="list-style-type: none"> <li>- Students must attend 15 minutes before the class starts.</li> <li>- Students must switch off all electronic devices.</li> <li>- Students must inform the lecturer if they will not attend the class due to sickness, etc.</li> <li>- Students must submit all class assignments before the deadline.</li> <li>- Students must attend the exam to get final grade.</li> </ul> <b>Form of examination:</b> Written exam: Essay
<b>Media employed</b>	Direct Whiteboard, Power Point Presentation, online conference platform
<b>Reading List</b>	<ol style="list-style-type: none"> <li>1. Ewing, A.C. 2008. Persoalan-persoalan Mendasar Filsafat. Yogyakarta: Pustaka Pelajar.</li> <li>2. Rake Sarasin, Ravertz, Jerome R. 2009. Filsafat Ilmu: Sejarah &amp; Ruang Lingkup Bahasan. Yogyakarta: Pustaka Pelajar.</li> <li>3. Surajiyo. 2009. Filsafat Ilmu dan Perkembangannya di Indonesia. Jakarta: PT. Bumi Aksara.</li> <li>4. Tim Dosen Filsafat Ilmu Fakultas Filsafat UGM. 2010. Filsafat Ilmu sebagai Dasar Pengembangan Ilmu Pengetahuan. Yogyakarta: Liberty.</li> <li>5. Verhaak. C &amp; Haryono Imam. 1989. Filsafat Ilmu Pengetahuan. Jakarta: Gramedia</li> <li>6. Yuyun Suriasumantri. 2007. Filsafat Ilmu – Sebuah Pengantar Populer. Jakarta: Pustaka Sinar Harapan</li> </ol>