



**MINISTRY OF EDUCATION, CULTURE, RESEARCH, AND TECHNOLOGY**  
**UNIVERSITAS NEGERI JAKARTA**  
**FACULTY OF MATHEMATICS AND NATURAL SCIENCE**

Jl. Rawamangun Muka, RT 11/RW14, Rawamangun, Pulo Gadung  
 East Jakarta City, Special Capital Region Of Jakarta 13220  
 Email: [pend.mat@unj.ac.id](mailto:pend.mat@unj.ac.id), <http://fmipa.unj.ac.id/penmat>

## The Philosophy of Science

Module designation	The Philosophy of Science
Semester(s) in which the module is taught	2
Person responsible for the module	Dr. Lukman El Hakim, M.Pd. Dr. Yudi Mahatma, M.Si.
Language	Indonesia
Relation to curriculum	<i>Faculty</i>
Teaching methods	Teaching methods used in this course are: <ul style="list-style-type: none"> <li>• Lecture (i.e., small group discussions and project-based learning)</li> <li>• Structured assignments (i.e., project development and presentations)</li> </ul>
Workload (incl. contact hours, self-study hours)	Total workload is 340 minutes per week which consists of 100 minutes learning activity, 120 minutes structured task and 120 minutes individual learning per week for 16 weeks. <b>TOTAL WORKLOAD PER SEMESTER</b> <b>340 X 16 = 5440 minutes = 90,67 hours</b>
Credit points	90,67 hours / 30 hours  ≈≈ 3 ECTS
Required and recommended prerequisites for joining the module	
Module objectives/intended learning outcomes	<ul style="list-style-type: none"> <li>• Students understand the philosophy of science</li> <li>• Students understand ethical problems in science</li> <li>• Students understand scientific reasoning</li> </ul>
Content	<b>Students will learn about:</b> Philosophy of Science, Ethics, Deductive Inference, Inductive Inference
Examination forms	Assessment for this course includes: 50% structured assignments, 20% midterms and 30% final exams
Study and examination requirements	<b>Study and examination requirements:</b> Students should have attended all lectures and submitted all scheduled individual and group assignments prior to the final examination.
Reading list	<b>Main References:</b> Jujun S. Sumantri, Filsafat Ilmu



## Pedagogic and Didactic

### Foundation Of Education

<b>Module name</b>	Landasan Pendidikan
<b>Module level, if applicable</b>	Bachelor
<b>Code, if applicable</b>	53074
<b>Subtitle, if applicable</b>	-
<b>Course, if applicable</b>	Concept of education
<b>Semester(s) in which the module is taught</b>	Odd or even
<b>Person responsible for the module</b>	MKDK course team
<b>Lecturer</b>	MKDK course team
<b>Language</b>	Indonesian Language [Bahasa Indonesia]
<b>Relation to Curriculum</b>	This course is offered in odd or even 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. assignment, case-based learning, project-based learning).</li> <li>- Structured assignments (i.e. essays, project-based learning, case-based learning)</li> <li>- Practice (i.e. case study of model and development of education in Indonesia).</li> </ul> <p>Class size of lecture is 30 students.</p> <p>This course meets 54 contact hours for lecture and 64 contact hours for assignment.</p>



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<b>Workload</b>	Students are required to meet a minimum of 182 hours in one semester, which consist of: - 54 hours for lecture; - 64 hours for structured assignments; - 64 hours for individual study.
<b>Credit points</b>	4 credit points (equivalent with 6 ECTS)
<b>Requirements according to the examination regulations</b>	Students must attend all classes and submit all class assignments that are scheduled before the final tests.
<b>Recommended prerequisites</b>	Students must attend all classes and submit all class assignments that are scheduled before the final tests.
<b>Module objectives/intended learning outcomes</b>	After completing the course in this given case: <b>Intended Learning Outcomes Attitude (A3) :</b> Differentiating, giving examples, analyzing, as well as criticizing the concept of education, and associating it with the reality of education in daily life.

<b>Content</b>	<b>Students will learn about:</b> Concept of education; concept of the science of education; education and human relations; fundamentals and principles of education; the historical account of education in Indonesia; as well educational problems in educational practices.
<b>Forms of Assessment</b>	Assessment is carried out based on written examinations, assessment/evaluation of the learning process and performance with the following components: Structured tasks: 50% Mid-Test: 20% Final Test: 30%
<b>Study and examination requirements and forms of examination</b>	<b>Study and examination requirements:</b> - Students must design a model/scenario/procedure of educational models in Indonesia. - Assignment is due within 4 weeks, and to be submitted on Mid-Test at the latest. - Assignment must be completed in groups with maximum 5 members. - Draft of Lesson Plan is typed on A4-size paper, in size 12 Times New Roman font with 1.15 line spacing. - Assignment is to be submitted in hard and soft files. - Learning video is saved in google drive and or youtube



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	channel of which link is forwarded to the lecturer. <b>Form of examination:</b> Written exam: Essay
<b>Media employed</b>	Books, Articles, Reading Texts, Power Point Presentation, Video
<b>Reading list</b>	1. Newspapers, magazines, internet other mass media. 2. Cases from youtube.