Module Handbook

Module's Name	Educational Philosophy
Module's Grade	Undergraduate Program (S-1)/Bachelor
Abbreviation /code (if any)	
Subtitles (if any)	
Courses included in the module (if any)	
Semester/year	4/2nd year
Module Coordinator	Nadi Suprapto, Ph.D
Lecturer	Nadi Suprapto, Ph.D Dra. Suliyanah, M.Si Setyo Admoko, M.Pd Utama Alan Deta, M.Pd., M.Si
Language used	Indonesian
Classification in the curriculum	Compulsory course/~~elective course~~
Learning format/number of class hours per week	Per week consists of: 2 hours face to face (1 hour face to face = 50 minutes/hour)
Workload	2x50 minutes face to face, 2x60 minutes structured tasks, 2x60 minutes independent learning, for 14 weeks, a total of 84 hours face-to-face/semester
CU	2
Precondition course	-
Learning Outcome	**Knowledge:** Apply pedagogical knowledge in teaching physics **Skill:** Able to process information effectively in solving physics problems and adapting to the situation at hand through a physics education philosophy approach **Competence:** 1. Able to communicate effectively in solving physics problems and adapting to the situation at hand through a philosophy approach to physics education 2. Able to work together effectively in solving physics problems and adapting to situations faced through the philosophical approach of physics education **Attitude and Social:** Able to think at high levels (complex) effectively in solving physics problems and adapting to situations faced through the philosophical approach of physics education.
Content	This educational philosophy course has four main parts, namely: Humans as thinking creatures; The scope of the philosophy of science; A means of scientific thinking, and science; as well as the nature and use of science. The first part discusses the advantages of humans with reason so that they have curiosity and thinking abilities that give birth to knowledge. The second part discusses science as a study of philosophy, the origins of science and the history of the development of science and the relationship between science and philosophy. The third section discusses the basics of knowledge which includes reasoning, logic, as a way to find truth, criteria

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<tr><td></td><td>for truth, sources of knowledge and truth; the basics of science which includes the object of the study of knowledge (ontology) as well as the interpretation of the nature of the objectivity of the relation, the law of causality and order. The fourth section discusses the scientific means of thinking which include language, mathematics and statistics, the role of mathematics in logic and the development of science, besides that it also discusses aspects of logic, namely the role of symbols, scientific systems and theories, scientific explanations and finally discussed the nature and usefulness of science.</td></tr>
<tr><td>Attribute soft skill</td><td>Critical thinking</td></tr>
<tr><td>Assessment of CLO/exam</td><td>Students are considered competent and pass if they get at least a minimum test score of 68 (Mid and Final), and structured activities (assignments/T) and participatory activities (P)
The final grade (NA) is calculated according to the formula:
$NA = \frac{(2xP)+(3xT)+(2xMid)+(3xFinal)}{10}$
Convert the 0-100 scale value to a 0-4 scale and the letters are arranged as follows.

<table>
<tr><th>Alphabet</th><th>Score</th><th>Interval</th></tr>
<tr><td>A</td><td>4,00</td><td>85 ≤ A < 100</td></tr>
<tr><td>A-</td><td>3,75</td><td>80 ≤ A- < 85</td></tr>
<tr><td>B+</td><td>3,50</td><td>75 ≤ B+ < 80</td></tr>
<tr><td>B</td><td>3,00</td><td>70 ≤ B < 75</td></tr>
<tr><td>B-</td><td>2,75</td><td>65 ≤ B- < 70</td></tr>
<tr><td>C+</td><td>2,50</td><td>60 ≤ C+ < 65</td></tr>
<tr><td>C</td><td>2,00</td><td>55 ≤ C < 60</td></tr>
<tr><td>D</td><td>1,00</td><td>40 ≤ D < 55</td></tr>
<tr><td>E</td><td>0,00</td><td>0 ≤ E < 40</td></tr>
</table></td></tr>
<tr><td>Media</td><td>Handbook, power point slide</td></tr>
<tr><td>Reference</td><td>1. Kuhn, T., S., 2000. The Structure of Scientific Revolutions, Peran Paradigma dalam Revolusi Sains. Bandung: Remaja Rosdakarya
2. Bakhtiar, A., 2006. Filsafat Ilmu. Jakarta: Raja Grafindo Persada. Campbell, N., 1953. What is Science? New York: Dover Publication.
3. Roberts, R., M., 2004. Serendipity, Penemuan-penemuan Bidang Sains yang Tidak Disengaja. Bandung: Pakar Raya.
4. Kant, Immanuel, 2004, Metaphysical Foundations of Natural Science, Cambridge: Cambridge U. Press.
5. Hegel, G. W. F., 2004, Philosophy of Nature Oxford: Oxford U. Press.</td></tr>
<tr><td>Note</td><td></td></tr>
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