Bachelor of Education in Science **MODULE HANDBOOK**

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Module designation	Science History and Phylosophy
Module level, if applicable	Undergraduate
Code, if applicable	PIPAUM6412
Subtitle, if applicable	-
Courses, if applicable	-
Semester(s) in which the module is taught	Even/Autumn Term
Person responsible for the module	Sugiyanto, S.Pd, M.Si
Lecturer	Sugiyanto, S.Pd, M.Si
Language	Bahasa Indonesia
Relation to curriculum	Undergraduate degree program, elective, 4th semester.
Type of teaching, contact hours	Lecture/instructional and discussion, cooperative learning, 100 minutes per lecture per week
Workload	1. Lectures: 2 x 50 = 100 minutes (1.7 hours) per week. 2. Exercises and Assignments: 2 x 60 = 120 minutes (2 hours) per week. 3. Independent Study: 2 x 60 = 120 minutes (2 hours) per week.
Credit points	2 credit points (~3.17 ECTS-eq).
Requirements according to the examination regulations	A student must have attended at least 80% of the lectures to sit in the exams.
Recommended prerequisites	-
Module objectives/intended learning outcomes	After completing this module, students are expected to: LO6: master developmental psychology and learning theories to design, implement, and evaluate innovative and productive science learning oriented to develop students' capability and adaptability towards curriculum, technology, and environmental changes along with the upholding of social sensitivity, cultural, view, and religious diversity.
Content	1. Understanding the philosophy of science 2. The history of the development of science 3. The basis of science: hypotheses, theory, and law, 4. The main problems in the development of science

	5. Sources and limits of scientific development 6. The essence science and its implications for science learning 7. socio-scientific issues
Study and examination requirements and forms of examination	Project Report, Middle Semester Exam, and Semester Exam
Media employed	LCD, blackboard, moocs websites, UM e-learning system (Sipejar)
Reading list	1. Boersema, David. 2008. Philosophy of Science. NewYork: Pearson. 2. Poedjiadi, A. 2009. Filsafat Ilmu.Jakarta: Grapindo. 3. Schwartz, gary, e., russek & linda, g. 2006. The living energy universe: a fundamental discovery that transforms science and medicine. New york: hampton roads publishing. 4. Suriasumantri, J.S. 2001. Filsafat Ilmu Sebuah Pengantar Populer. Jakarta: CV. Muliasari.
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