

UNIVERSITAS NEGERI YOGYAKARTA

FACULTY OF MATHEMATICS AND NATURAL SCIENCES DEPARTMENT OF PHYSICS EDUCATION PHYSICS STUDY PROGRAM

Colombo St. Number 1 Yogyakarta 55281 Telephone (0274)565411 Ext. 217, fax (0274) 548203 Web: http://fisika.fmipa.uny.ac.id/, E-mail: fisika@uny.ac.id

Bachelor of Physics

MODULE HANDBOOK

Module name:	Philosophy of Physics
Module level, if applicable:	Bachelor Programme
Code:	FSK6324
Sub-heading, if applicable:	-
Classes, if applicable:	-
Semester:	6 rd
Module coordinator:	Dr. R. Yosi Aprian Sari, M.Si
Lecturer(s):	Suparno, M.App.Sc., Ph.D.
Language:	Bahasa Indonesia
Classification within the curriculum:	Elective Course
Teaching format / class hours per week during the semester:	100 minutes lectures and 120 minutes structured activities per week
Workload:	Total workload is 91 hours per semester which consists of 100 minutes lectures, 120 minutes structured activities, and 120 minutes individual study per week for 16 weeks
Credit points:	2
Prerequisites course(s):	
Course Outcomes	 After taking this course the students have ability to: CO1. Demonstrate a collaborative and independent attitude in carrying out individual and group tasks CO2. Know the history of physics from the Greek to the modern era CO3. Mastering the Development of the Scientific Method
	CO4. Disseminating Scientific Research Results
Content:	The materials studied include: The history of science from the Greek era to the Renaissance, Development of the scientific method, Development of Classical Physics: Mechanics, Heat, Optics, Electromagnetism, Atom, Development of Modern Physics: Relativity and Quantum Physics, The Unification of Physical Phenomena, Dissemination of the Results of Scientific Research
Study / exam achievements:	Attitude assessment is carried out at each meeting by observation and / or self-assessment techniques using the assumption that basically every student has a good attitude.

	The student is given a value of very good or not good attitude they show it significantly compared to other students in general The result of attitude assessment is not a component of the fina grades, but as one of the requirements to pass the course Students will pass from this course if at least have a good attitude. The final mark will be weight as follow:							
	No	CO	Assessment	Weight				
			Object	Technique				
	1	CO2,	a. Assignment	Presentation	30%			
		CO3	b. Quiz	/ written test	15%			
		and	c. Mid		25%			
		CO4	d. Final Exam		30%			
				Total	100%			
Forms of media:	Board, LCD Projector, Laptop/Computer							
	A. Savin, A. J., 1994, A Brief History and Philosophy of Physics, Department of Physics, Trent University.							
Literature:	B Serres M and Hawkes J 2001 The Birth of Physics							
	Clinamen Press I td							

PLO and CO mapping

	PLO1	PLO2	PLO3	PLO4	PLO5	PLO6	PLO7	PLO8
CO1	\checkmark							
CO2		\checkmark						
CO3			\checkmark				\checkmark	
CO4							\checkmark	\checkmark