



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:	Astronomy
Module level, if applicable:	Bachelor Program
Code:	FSK6273
Sub-heading, if applicable:	-
Classes, if applicable:	-
Semester:	6
Module coordinator:	Denny Darmawan, M.Sc.
Lecturer(s):	Denny Darmawan, M.Sc., Dr. Sukardiyono
Language:	Bahasa Indonesia
Classification within the curriculum:	Elective Course
Teaching format / class hours per week during the semester:	Lecture (100 minutes lectures and 120 minutes structured activities).
Workload:	Total workload is around 91 hours in one semester which consists of 100 minutes of lectures, 120 minutes of structured activities, and 120 minutes of individual study per week for 16 weeks.
Credit points:	2 SKS (3.25 ECTS)
Prerequisites course(s):	-
Course Outcomes	Students graduating from this course will be able to:

	CO1. Understand the basic concepts of celestial sphere and phenomena observed on it and apply them in observation activities CO2. Understand the basic concepts of spectroscopy and radiation used in obtaining the physical information about celestial objects CO3. Understand the basic physical properties of stars (including the Sun) and their evolution CO4. Understand the galactic structure and basic concepts in cosmology
Content:	This course discusses the basic concepts of celestial objects (stars, galaxies and universe) and the method to obtain the physical information from them. These include the concept of celestial sphere, stars and their evolution, stellar spectroscopy and radiation, galaxies and cosmology
Study / exam achievements:	The final grade will be weighted as follow: a. Case study : 20% b. Group project : 30% c. Midterm exam: 20% d. Final exam : 30%
Forms of media:	Board, LCD Projector, Laptop/Computer
Reference:	1. Chaisson, E. and McMillan, S., 2017, <i>Astronomy Today</i> 9th edition, Pearson 2. Seeds, M.A., and Backman, D., 2018, <i>Foundations of Astronomy</i>, 14th edition, Cengage Learning

PLO and CO mapping

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