MINISTRY OF EDUCATION AND CULTURE
UNIVERSITAS NEGERI SURABAYA
FACULTY OF MATHEMATICS AND NATURAL SCIENCES
DEPARTMENT OF PHYSICS
Ketintang Campus, Jalan Ketintang, C3 Building, Surabaya 60231
Website: https://pendidikan-fisika.fmipa.unesa.ac.id/, email: s1-pfis@unesa.ac.id

Undergraduate Programme of Physics Education **Module Handbook**

Module Name :	*Statistika* Statistics
Module level :	Bachelor degree/Undergraduate Programme
Course Code :	8420303196
Abbreviation, if applicable:	-
Courses included in the module, if applicable:	Not Applicable
Semester/Term	4/Second Year
Module coordinator(s)	
Lecturer(s):	
Language:	*Bahasa Indonesia*
Classification within the curriculum:	Compulsory/ ~~Elective~~
Teaching format/class hours per week during the semester:	2 contact hours of lectures (Indonesia credit semester or sks*)
Workload :	2 x 50 minutes lectures, 2 x 60 minutes structured activity, 2 x 60 minutes individual activity, 14 weeks per semester, 90 total hours per semester ~ 3.18 ECTS**
Credit Point:	2 sks (3.18 ECTS)
Requirements:	
Learning goals/competencies:	1. Have the ability to use physics concepts and appropriate mathematical/computing methods to get solutions to quantitative problems in physics 2. Have the ability to collect data and analyze data and compile a coherent report on its findings 3. Using symbolic and numeric language creatively in describing processes and natural phenomena qualitatively and quantitatively.
Content	Data distribution, mean size, probability distribution, and their properties, binomial distribution, poison distribution, normal distribution, sampling distribution, statistical inference, interval estimation, hypothesis testing for one population and two populations. Learning is carried out using discussion methods, problem solving and assignments.
Attribute Soft skill:	Scientific report, public speaking, and team work
Study/exam achievements:	Students are considered to complete the course and pass if they obtain at least 40% of maximum final grade. The final grade (NA) is calculated based on the following ratio:

Assessment Components	**Percentage of contribution**
Participation	20%

	Assignment: 30% Mid-semester test: 20% Final semester test: 30%
Learning Methods :	Student-centered approach, lecture and discussion, and presentations (structured activities)
Form of Media:	*Power Point* slides, e-book file, and multimedia.
Literature (primary references):	1. Giforf, JP Frucher, Fundamental statistics In physics and Education, New york: Mc Gwaw Hill 2. Sudjana. 1996. Statistical Methods. Bandung: Tarsito. 3. Sudjana. 1983. Regression and correlation analysis techniques. Bandung: publisher Tarsito
Notes:	*1 sks in learning process = three periods consist of: (a) scheduled instruction in a classroom or laboratory (50 minutes); (b) structured activity (60 minutes); and (c) individual activity (60 minutes) according to the Regulation of Indonesia Ministry of Research, Technology, and Higher Education No. 44 Year 2015 jo. the Regulation of Indonesia Ministry of Research, Technology, and Higher Education No. 50 Year 2018.
	**1 sks = 1,59 ECTS according to Rector Decree Of Universitas Negeri Surabaya No. 598/Un38/Hk/Ak/2019