Module Handbook

Module's Name	Statistics
Module's Grade	Undergraduate Program (S-1)/Bachelor
Abbreviation /code (if any)	
Subtitles (if any)	
Courses included in the module (if any)	
Semester/year	3/2nd year
Module Coordinator	Nadi Suprapto, Ph.D
Lecturer	Prof. Dr. Budi Jatmiko Dr. Dwikoranto Nadi Suprapto, Ph.D Dr. Binar Kurnia Prahani
Language used	Indonesian
Classification in the curriculum	Compulsory course/~~elective course~~

Learning format/number of class hours per week	Per week consists of:
	   3 hours face to face
	   (1 hour face to face = 50 minutes/hour)

Workload	3x50 minutes face to face, 3x60 minutes structured tasks, 3x60 minutes independent learning, for 14 weeks, a total of 126 hours face-to-face/semester
CU	2
Precondition course	-
Learning Outcome	**Knowledge:** Apply knowledge in relating to physics education research **Skill:** Able to process information effectively in solving physics problems and adapting to the situation at hand through a physics education philosophy approach **Attitude and Social:** Demonstrate good scientific manners, critical thinking, and innovation skills in educational, research, and professional fields
Content	This statistics course has seven main parts, namely: (1) Statistical Data, Parametric Statistics & Non-Parametric Statistics, Statistical Software; (2) homogeneity and similarity test of two means, normality test; (3) Difference Test (Parametric Average Statistical Test & Non Parametric Statistics); (4) Probability, confidence interval & Estimated mean and variance; (5) Linear and multivariable regression; (6) Correlation and covariance; (7) Anova and Anacova.
Attribute soft skill	Critical thinking

Assessment of CLO/exam	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.

Alphabet	Score	Interval
A	4,00	85 $\leq$ A $<$ 100
A-	3,75	80 $\leq$ A- $<$ 85
B+	3,50	75 $\leq$ B+ $<$ 80
B	3,00	70 $\leq$ B $<$ 75
B-	2,75	65 $\leq$ B- $<$ 70
C+	2,50	60 $\leq$ C+ $<$ 65
C	2,00	55 $\leq$ C $<$ 60
D	1,00	40 $\leq$ D $<$ 55
E	0,00	0 $\leq$ E $<$ 40

Media	Handbook, power point slide, SPPS
Reference	1. Ken Black, (2013), Business Statistics, John Willey & Sons. 2. Wijaya, Tony. (2010), Analisis Multivariat, Penerbit Cahaya Atma. 3. Hair, J.F., Black, B., Babin, B., Anderson, R, E & Tatham, R. L., (2006). Multivariate data analysis, 6th Edition, New Jersey : Prentice Hall International, Inc B. 4. Wijaya, Tony. (2012), Cepat Menguasai SPSS 20, Penerbit Cahaya Atma. 5. Wijaya, Tony. (2013), SEM & PLS (Panduan Teknik statistik SEM & PLS), Penerbit Cahaya Atma.
Note	