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MODULE HANDBOOK

Module name	Analisis Data Eksploratif (Exploratory Data Analysis)
Module level, if applicable	Bachelor
Code, if applicable	MMS - 1410
Subtitle, if applicable	-
Courses, if applicable	Exploratory Data Analysis
Semester(s) in which themodule is taught	2 / first year
Person responsible for themodule	Yunita Wulan Sari, S.Si., M.Sc.
Lecture(s)	Dr. Adhitya Ronnie Effendie, S.Si., M.Si., M.Sc. Yunita Wulan Sari, S.Si., M.Sc.
Language	Indonesian
Classification within the Curriculum	Compulsory course/ ~~Elective Studies~~
Teaching format /classhours per week during the semester:	2 hours lecture and 2 hours laboratory session
Workload	– 2 hours lecture+ 4 hours individual study, 14 weeks lecture persemester, – 2 hours laboratory session + 2 hours individual study, 10 weeks laboratory session per semester, – total 124 hours a semester
Credit points	3
Requirements	MMS – 1404 (Metode Statistika I)
Module objectives/intended learning outcomes	By the end of this course, students are expected to be able to: CO-1 : Explain and apply the exploratory data analysis as one of the statistical analysis methods. CO-2 : Construct the numerical summary, standardization, and transformation. CO-3 : Apply the hypotheses tests and one-way analysis of variance to compare the batches. CO-4 : Conduct an exploratory and confirmatory regression analysis.
Content	Exploratory analysis : stem and leaf plot, center measure and dispersion, numerical summary, box plot, standardization, transformation. Random sample and sampling distribution. Confirmatory analysis : hyphotesis testing for population mean of one batch and several batches, one way analysis of variance. Exploratory and confirmatory regression analysis.

Study and xamination requirements and forms of examination	The weight of assignments will be as follows: i. Quiz, homework 25% ii. Mid semester exam 35% iii. Final exam 40% Grade scale: A: 85<score≤100 A-: 80<score≤85 A/B: 75<score≤80 B+: 70<score≤75 B: 65<score≤70 B-: 60<score≤65 B/C: 55<score≤60 C+: 50<score≤55 C: 45<score≤50 C-: 40<score≤45 C/D: 35<score≤40 D+: 30<score≤35 D: 20<score≤30 E: 0≤score≤20
Media employed	Slides and LCD projectors, whiteboards
Reading List	1. Kartiko, Sri Haryatmi, (2013*), Diktat Analisis Data Eksploratif*, bab 1-8, BOPTN, UGM. 2. Tukey, John W. (1977), *Explanatory Data Analysis*, Addison-Weslay. 3. Hoaglin, D.C., Mosteller, F., & Tukey, J.W. (1983), *Understanding Robust and Exploratory Data Analysis*, John Wiley & Sons, Inc. 4. Cabrera, J. & McDouggal, A. (2001), *Statistical Consulting*, Springer. 5. Gelman, A. & Nolan, D. (2002), *Teaching Statistics: A bag of tricks*, Oxford University Press. 6. Sullivan (2004), *Statistics: Informed decisions using data*, Prentice Hall. 7. Sari, Y.W. (2016), *Modul Praktikum Analisis Data Eksploratif*, Lab.Komputasi Matematika dan Statistika FMIPA UGM

CO and PLO mapping

	PLO 1	PLO 2	PLO 3	PLO 4	PLO 5	PLO 6	PLO 7
CO 1	x						
CO 2		x					
CO 3			x				
CO 4				x			