



# UNIVERSITAS GADJAH MADA

Faculty of Mathematics and Natural Sciences

Mathematics Department

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## MODULE HANDBOOK

Module name	Metode Statistika I (Statistical Methods I)						
Module level, if applicable	Bachelor						
Code, if applicable	MMS - 1404						
Subtitle, if applicable	-						
Courses, if applicable	Statistical Methods I						
Semester(s) in which the module is taught	1 / first year						
Person responsible for the module	Drs. Zulaela., Dipl.MedStats., M.Si.						
Lecture(s)	Drs. Zulaela., Dipl.MedStats., M.Si. Yunita Wulan Sari, S.Si., M.Sc. Rianti Siswi Utami, S.Si., M.Sc.						
Language	Indonesian						
Classification within the Curriculum	Compulsory course/ <u><a href="#">Elective Studies</a></u>						
Teaching format /classhours per week during the semester:	2 hours lecture and 2 hours laboratory session						
Workload	<ul style="list-style-type: none"><li>• 2 hours lecture+ 4 hours individual study, 14 weeks lecture persemester,</li><li>• 2 hours laboratory session + 2 hours individual study, 10 weeks laboratory session per semester,</li><li>• total 124 hours a semester</li></ul>						
Credit points	3						
Requirements	-						
Module objectives/intended learning outcomes	By the end of this course, students are expected to be able to: CO-1 : Interpret the basic statistics, identify the probability concepts, calculate the probability of event and apply it to get the distribution of random variable. CO-2 : Use statistical analysis in order to do inference includes estimation and hypothesis testing. CO-3 : Apply basic statistical methods for many different data set.						
Content	Descriptive statistics : data collection, data presentation. Measures of central tendency, dispersion, elementary probability, random variables and their distributions, sampling distribution. The Binomial, Hypergeometric, Poisson and Normal distributions. Statistical inference : estimation and test of hypotheses for one and two populations for mean, proportion, and variance.						
Study and examination requirements and forms of examination	The weight of assignments will be as follows: <table><tr><td>i. Quiz, homework</td><td>15%</td></tr><tr><td>ii. Mid semester exam</td><td>40%</td></tr><tr><td>iii. Final exam</td><td>45%</td></tr></table> Grade scale: A: $85 \leq \text{score}$ A/B : $75 \leq \text{score} < 85$ B: $60 \leq \text{score} < 75$ B/C : $50 \leq \text{score} < 60$	i. Quiz, homework	15%	ii. Mid semester exam	40%	iii. Final exam	45%
i. Quiz, homework	15%						
ii. Mid semester exam	40%						
iii. Final exam	45%						

	C: $40 \leq \text{score} < 50$ D: $20 \leq \text{score} < 40$ E: $\text{score} < 20$
Media employed	Slides and LCD projectors, whiteboards
Reading List	<ol style="list-style-type: none"> <li>1. Mario F, Triola, 2004, <i>Elementary Statistics</i>, Addison Wesley</li> <li>2. Walpole, Ronald E., <i>Pengantar Statistika, edisi 3</i>, Gramedia</li> <li>3. Walpole, R.E., Myers, R.H., Myers, S.L., dan Ye, K., 2012, <i>Probability and Statistics for Engineers and Scientists, Ninth Edition</i>, Prentice Hall, New York.</li> </ol>

#### 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			