



## UNIVERSITAS GADJAH MADA

Faculty of Mathematics and Natural Sciences  
Mathematics Department

Sekip Utara Bulaksumur Yogyakarta 55281 Telp: +62 274 552243 Fax: +62 274 555131 Email: [stat.fmipa@ugm.ac.id](mailto:stat.fmipa@ugm.ac.id) Website: <http://s1stat.fmipa.ugm.ac.id/>

Undergraduate Program in Statistics

Telp : +62 274 552243

Email : [stat.fmipa@ugm.ac.id](mailto:stat.fmipa@ugm.ac.id); [kaprodi-s1-statistika.mipa@ugm.ac.id](mailto:kaprodi-s1-statistika.mipa@ugm.ac.id)

Website : <http://s1stat.fmipa.ugm.ac.id/>

## MODULE HANDBOOK

Module name	Metode Statistika II (Statistical Methods II)
Module level, if applicable	Bachelor
Code, if applicable	MMS 1409
Subtitle, if applicable	-
Courses, if applicable	Metode Statistika II (Statistical Methods II)
Semester(s) in which the module is taught	2 / first year
Person responsible for the module	Dr. Herni Utami, M.Si
Lecture(s)	Vennie Nastiti Lestari, S.Si., M.Sc, Dr. Herni Utami, M.Si
Language	Bahasa Indonesia
Classification within the Curriculum	Compulsory course/ Elective Studies
Teaching format /class hours 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	MMS-1404 Metode Statistika I (Statistical Methods I)
Module objectives/intended learning outcomes	By the end of this course, you should see improvement in your ability to: CO 1. Interpret and explain the basic statistics. CO 2. Identify and explain nonparametric statistics CO 3. Analyze data using basic statistical methods and nonparametric statistics CO 4. Apply basic statistical methods and nonparametric statistics for many different data set using statistical software (SPSS, Minitab, Ms.Excel) CO 5. Analyze real dataset, interpret and communicate the results using basic statistical methods and nonparametric statistics to others.
Content	One way ANOVA, multiple comparison analysis (MCA), two way ANOVA, linear regression, correlation, multiple linear regression, contingency tables: independence and homogeneity, Fisher's exact test, introduction nonparametric statistics: sign test, wilcoxon signed rank test for matched pairs, friedman test, wilcoxon rank-sum test for two

	independent samples, kruskal-wallis test, rank correlation, run test for randomness.
Study and examination requirements and forms of examination	<p>The weight of assignments will be as follows:</p> <ul style="list-style-type: none"> <li>i. Quiz, homework 25%</li> <li>ii. Mid semester exam 35%</li> <li>iii. Final exam 40%</li> </ul> <p>Grade scale:</p> <p>A: <math>85 &lt; \text{score} \leq 100</math>  A-: <math>80 &lt; \text{score} \leq 85</math>  A/B: <math>75 &lt; \text{score} \leq 80</math>  B+: <math>70 &lt; \text{score} \leq 75</math>  B: <math>65 &lt; \text{score} \leq 70</math>  B-: <math>60 &lt; \text{score} \leq 65</math>  B/C: <math>55 &lt; \text{score} \leq 60</math>  C+: <math>50 &lt; \text{score} \leq 55</math>  C: <math>45 &lt; \text{score} \leq 50</math>  C-: <math>40 &lt; \text{score} \leq 45</math>  C/D: <math>35 &lt; \text{score} \leq 40</math>  D+: <math>30 &lt; \text{score} \leq 35</math>  D: <math>20 &lt; \text{score} \leq 30</math>  E: <math>0 \leq \text{score} \leq 20</math></p>
Media employed	Slides and LCD projectors, whiteboards
Reading List	<ol style="list-style-type: none"> <li>1. Anonim, 2011. <i>Modul Praktikum Metode Statistika II</i>, Laboratorium Komputasi Matematika dan Statistika, FMIPA, UGM.</li> <li>2. Mario. F, Triola, 2004, <i>Elementary Statistics</i>, Adison Wesley</li> <li>3. Walpole. Ronald. E, 1993, <i>Pengantar Statistika</i>, Edisi 3, Gramedia</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				
CO 4			x				
CO 5				x			