

UNIVERSITAS GADJAH MADA

Faculty of Mathematics and Natural Sciences

Department of Mathematics
Sekip Utara Bulaksumur Yogyakarta 55281 Telp: +62 274 552243 Fax: +62 274 555131 Email: math@ugm.ac.id Website: http://math.fmipa.ugm.ac.id

Doctor in Mathematics

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MODULE HANDBOOK **Doctoral in Mathematics**

Module name:	Topik dalam dalam Komputasi Statistika Lanjut B (Topics in Advanced Computation of Statistics B)			
Code, if applicable:	MMM 7505			
Subtitle, if applicable	TVIIVII 7303			
Semester(s) in which the module is taught:	1 st or 2 nd semester			
The person responsible for the module:	Chair of Computation of Statistics Research Group			
Language:	Bahasa Indonesia			
Relation to curriculum:	Doctoral Degree in Mathematics, Elective Course			
Teaching methods	Lecture, classroom discussion, project-based learning.			
Workload (incl. contact hours, self-study hours)	The total workload is 232 hours per semester, which consists of 50 minutes of lectures per week, 120 minutes of structured activities per week, and 120 minutes of individual study per week; in total is 16 weeks per semester, including mid-exam and final exams.			
Credit points in Credit Units	3			
Required and recommended prerequisites for joining the module	Students have learned some basic courses in statistics and statistical mathematics course. Students also have some knowledge on statistical software, such as R.			
Module objectives/intended	After completing this course the students have ability to:			
learning outcomes:	CO1 analyze various aspects of statistical computing and/or computational statistics CO2 conduct statistical programming CO3 apply various statistical methods using real data, do necessary computation using statistical software and interpret the output			
Content:	It will be derived from the research topic of the students. It will be focused on the theory, models, and method of specific data analysis used in the student research.			
Examination forms	Oral presentation, essay, paper			
Study and examination	The final mark will be weighted as follows:			
requirements and forms of examination:	Assessment methods Weight			
CAGIIIII GUI	No (components, activities) (percentage)			
	1 Final Examination (portfolio/essay/oral 35% presentation)			
	2 Mid-Term Examination 35% (portfolio/essay/presentation)			
	3 Class Activities: Presentation 30%			
	To pass the course, the minimum grade is B.			
Media employed:	Board, LCD Projector, Laptop/Computer			
Reading List:	1. Gentle, J.E., 2002, Elements of Computational Statistics, Springer, New York 2. Morgan, B.J. T., 2000, Applied Statistics Modelling, Arnold, London			

3. Daalgard,P., 2002, Introductory Statistics with R, Springer Verlag, London 4. Crawley, R.J., 2007, The R Book, Wiley, New York

Mapping of The COs and PLOs

	PLO – 1 S3 Mat	PLO – 2 S3 Mat	PLO – 3 S3 Mat	PLO – 4 S3 Mat	PLO – 5 S3 Mat	PLO -6 S3 Mat
CO 1	V	V	V		V	
CO 2	V	V	V		V	
CO 3	V	V	V		V	V

Last Modified Date : October 9, 2023



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Subtitle, if applicable	11111111 7303			
Semester(s) in which the	1 st or 2 nd semester			
module is taught:	1 of 2 semester			
The person responsible for the	Chair of Computation of Statistics Research Group			
module:	Chair of Computation of Statistics Nesearch Group			
Language:	Bahasa Indonesia			
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	including mid-exam and final exams.			
Credit points in Credit Units	3			
Required and recommended	Students have learned some basic courses in statistics and statistical			
prerequisites for joining the	mathematics course.			
module	Students also have some knowledge on statistical software, such as R.			
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learning outcomes:	CO1 analyze various aspects of statistical computing and/or computational			
	statistics			
	CO2 conduct statistical programming			
	CO3 apply various statistical methods using real data, do necessary			
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CO 1	V	V	V		V	
CO 2	V	V	V		V	
CO 3	V	V	V		V	V

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