

Module name		Generalized Linear Model			
Module level, if applicable		Master's degree in 1 st year			
Code, if applicable		MST-513			
Semester(s) in which the module is taught		2 nd (second)			
Person responsible for the module		Akhamd Fauzy, Prof. Ph.D			
Lecturer		Akhamd Fauzy, Prof. Ph.D			
Language		Bahasa Indonesia			
Relation to curriculum		Compulsory course for BISA concentration in the first year (2 nd semester) Master Degree			
Types of teaching and learning	Class size	Attendance time (hours per week per semester)	Form of active participation	Workload (hours per semester)	
Interactive Lecturing	< 20	2.5	Problem solving	Face to face teaching	35
				Structured activities	48
				Independent study	48
				Exam	5
Total Workload		136 hours			
Credit points		3 CUs / 5.1 ECTS			
Requirements according to the examination regulations		Minimum attendance at lectures is 75%. Final score is evaluated based on quiz, assignment, mid-term exam, and final exam.			
Recommended prerequisites		-			
Related course		-			
Module objectives/intended learning outcomes		After completing this course, the students have ability to: CO1. Have a profound knowledge of exponential distribution family CO2. Understand the generalized linear model and link function CO3. Understand the concept of variance component CO4. Understand and implement the GLM data analysis and variance component with R/Python			
Content		1. Exponential Distribution Family 2. Generalized Linear Model and link function 3. Variance Component 4. GLM and Variance Compoennt Application with R/Python			
Study and examination requirements and forms of examination		The final mark will be weighted as follows:			
		No	Assessment components	Assessment types	Weight (percenta
		1	CO 1	Assignment, Quiz, Midterm Exam	20%
		2	CO 2	Assignment, Quiz, Midterm Exam	20%
		3	CO 3	Assignment, Quiz, Midterm Exam	20%



	4 CO 4 Assignment/Project, Final Exam 40%
Media employed	Google Classroom, relevant websites, slides (power points), video, interactive media, white-board, laptop, LCD projector
Reading list	<ol style="list-style-type: none">1. Piet de Jong and Gillian Z Heller, 2022, Generalized Linear Model for Insurance Data, CUP, UK2. Jeff Gill and Michelle Torres, 2019, Generalized Linear Models: A Unified Approach, Sage, Los Angeles3. Ulf Ollson, 2002, Generalized Linear Models. An applied approach, Studentlitteratur,4. P. McCullagh and J.A. Nelder, 1989, Generalized Linear Models, Wiley, UK5. Raymond H Myers, Douglas C. Montgomery, G. Geoffrey Vining, Timothy J. Robinson, 2010, Generalized Linear Models: with Applications in Engineering and the Sciences, Wiley, UK6. Peter K. Dunn and Gordon K. Smyth, 2018, Generalized Linear Models with Examples in R, Springer, New York, Wiley, UK7. James W Hardin and Joseph M Hilbe, 2018, Generalized Linear Models and Extensions, Stata Press, US

Date :	Date :	Date : May 5, 2023
Authorized by Head of Study Program:	Examined by Coordinator of Cluster Interest	Prepared by Lecturer/Coordinator of Lecturers:
Rohmatul Fajriyah	Jaka Nugraha, Prof., Dr.	Akhmad Fauzy, Prof., Ph.D