Module designation	Statistic in Social and Business
Semester(s) in which the module is taught	Odd semester
Person responsible for the module	Ir. Mujtahidah Anggriani Ummul Muzayyanah, S.Pt., M.P., Ph.D., IPM. Dr. Ir. Suci Paramitasari Syahlani, MM., IPM.
Language	Bahasa and English
Relation to curriculum	Specialization's Compulsory
Teaching methods	Classical lecture and discussion
Workload (incl. contact hours, self-study hours)	Total workload: 79 hours Contact hours: – Lecture: 23 hours – Academic activity: 28 hours Private study: 28 hours
Credit points	2/0
Required and recommended prerequisites for joining the module	None

Module objectives/intended learning outcomes	Course Outcomes (CO):
	1. Able to comprehend the type of data, presenting and describing data technique.
	2. Able to comprehend the probability basic concept, central limit theorem, estimation, and confidence intervals
	3. Able to comprehend various descriptive analysis and inferential analysis both parametrically or non-parametrically as analysis tool for supporting decision in context of social economy science especially in animal science.
	
	Expected Learning Outcomes:
	– Mastery in Sciences:
	  1. Able to master the design, management, and development of livestock research. (CO3)
	
	– Special skills:
	  1. Able to design interdisciplinary and multidisciplinary research in the animal husbandry. (CO3)
	  2. Able to solve problems and anticipate issues in the development of animal science and industry. (CO1, CO3)
	
	– General skills:
	  1. Able to develop logical, critical, systematic, and creative thought through scientific research, creation of design in the science and technology, which pays attention and applies humanity values according to their expertise. The graduates are able to arrange scientific concept and the study result based on the principles, procedures, and scientific ethics. (CO1, CO2)
	  2. Able to identify the science that becomes their research object and position it to a research map by using information technology in the context of science development and expertise implementation developed through interdisciplinary or multidisciplinary approaches. (CO1)
	  3. Able to make a decision in the context of solving problems

	in the development of science and technology, which pays attention and applies humanity values based on analysis study or experiment towards information and data. (CO3) 4. Able to communicate the result of reasoning and scientific research in form of thesis and scientific writing responsibly based on academic ethics in the accredited national journal. (CO3) 5. Able to maintain the academic integrity generally and avoid the plagiarism practice. (CO1) 6. Able to communicate spoken and written English effectively by using the information technology for the development of animal science and its implementation. (CO3)
Content	This course encompasses 2 (two) statistics branches: descriptive branch and inferential branch. Data collecting, summarizing and interpreting through numerical and graphical technic is part of descriptive statistics. Inferential statistics includes choosing and applying the statistics technique precisely for guessing or testing the population based on sample. The topics discussed includes the descriptive statistics, correlation, and simple regression, probability, point estimation and interval, hypothesis statistics, multiple regression, and time series analysis. Students are expected to find out and comprehend how to use parametric and non- parametric descriptive and develop several comprehensions on the inference statistics limitation and analysis data and statistics ethic.

Exams and assessment formats	Assessment Components	Course Outcomes (CO)	Percentage (%)
	1. Midterm exam (written test, take home exam, paper assignment)	CO1 & CO2	40
	2. Final exam (written test, take home exam, paper assignment)	CO2 & CO3	40
	3. Take-home written assignments	CO1, CO2, & CO3	20

Grade and Score			
Grade	Score	Grade	Score
A	≥80	C+	45-49,9
A-	75-79,9	C	40-44,9
A/B	70-74,9	C-	35-39,9
B+	65-69,9	C/D	30-34,9
B	60-64,9	D+	25-29,9
B-	55-59,9	D	20-24,9
B/C	50-54,9	E	0-19,9

Study and examination requirements	The final grade in the module is composed of 40% performance on Midterm exam, 40% final exam, and 20% take-home written assignment. Students must have a final grade of 70% or higher to pass

Reading list	– Lind, D.A., W. G. Marchal dan S. A. Wathen. 2015. Statistical Techniques in Business & Economics. 16th ed. McGraw Hill.
	– Learning books and articles related to the topics.

Module Handbook
Master in Animal Science UGM

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