

Universitas Negeri Surabaya Faculty of Economics and Business Islamic Economics Undergraduate Study Program

Document Code

Courses			CODE				Cou	ırse F	amil	ly	Cre	dit W	eight		SEME	STER	Cor Dat	npilati e	on
Economic St	atistics		602020306	3				npuls gram			T=3	P=0	ECTS	=4.77		2	Jan 202	uary 2 [°]	7,
AUTHORIZA [*]	TION		SP Develo	per						Course Cluster Coordinator				nator	Study Program Coordinate			ito	
			Clarashinta	a Canç	ggih, s	S.E, (CIFP				hmad I., M.SI		idlwan,		Dr. i	Ahmad S.Pd.	Ajib R , M.SE		ı,
Learning model	Case Studies																		
Program	PLO study pr	ogram	that is cha	ged	to the	e cou	ırse												
Learning Outcomes (PLO)	PLO-5	Maste gener	Mastering theoretical concepts in the fields of Islamic Economics, Islamic Business and Islamic Finance in general and specifically to solve problems procedurally in accordance with the scope of work.																
. ,	Program Obje	ectives	(PO)																
	PO - 1	Able t	o apply the p	orincip	ole of	respo	nsibi	lity in	work										
	PO - 2	Able t	o analyze th	eories	abou	ut stat	tistics	thord	oughl	у									
	PO - 3	Able t	o make the r	ight d	lecisio	ons ba	ased	on inf	orma	ition a	ınalysi	s and	statistic	al data					
	PO - 4	Able t	o design res	earch	to so	lve p	robler	ms in	the fi	eld of	Islam	c eco	nomics						
	PLO-PO Matr	ix																	
			P.O		PL	.O-5													
			PO-1		,	/													
			PO-2																
			PO-3																
			PO-4																
		-																	
	PO Matrix at	the end	of each lea	arnin	g sta	ge (S	Sub-F	20)											
			P.O								,	Neek							
				1	2	3	4	5	6	7	8	9	10 1	1 12	2 13	14	15	16	
		PC	D-1																
		PC)-2	1															
		PC	D-3																
)-4																
				<u> </u>		<u> </u>	<u> </u>	<u> </u>								1			1
Short Course Description	This course dis presentation of Inferential statis non-parametric solving problem	data; n stics inclu compar	neasurement ude probabili ative statistic	t of c ty; sa cs. Bv	entral mplin stud	l sym g and ving t	ptom I sam this c	s; dis pling ourse	spersi distri	ion m butior dents	easuren; stati: are al	ement stical of ole to	s; index estimation make a	numk on; hyp ppropr	er; as vothesis iate dec	well as testing;	trend parar	analy netric	sis and
	conting problem																		

- 1. Lind, Douglas A. Marchal, William G. and Wathen, Samuel A. 2022. BASIC STATISTICS FOR BUSINESS AND ECONOMICS: 10th edition. McGraw-Hill Education
- 2. Lind, Douglas A. Marchal, William G. and Wathen, Samuel A. 2020. Statistical Techniques in Business and Economics: 18th edition. McGraw-Hill Education
- 3. Indrarini, Rachma; Canggih, Clarashinta; Nurafini, Fira, Maryam. 2023. STATISTIK UNTUK EKONOMI ISLAM 1. Nizamia Learning Center.
- Suharyadi & Purwanto, SK. 2015. Statistika untuk Ekonomi & Keuangan Modern(ed 3). Buku 1 dan 2. Penerbit Salemba Empat
- 5. Lind, Douglas A. Marchal, William G. and Wathen, Samuel A. 2018. Teknik-Teknik Statistika dalam Bisnis dan Ekonomi (Ed15). Buku 1 dan 2. Penerbit Salemba Empat
- 6. Sugiyono. 2016. Statistika untuk Penelitian . Penerbit Alfabeta: Bandung
- 7. Boedijoewono, Noegroho. 2014. Pengantar Statistika Ekonomi dan Bisnis 1: Deskriptif. UPP STIM YKPN
- 8. Subagyo, Pangestu. 2012. Statistika Deskriptif. Yogyakarta:BPFE

Supporters:

- 1. Septianda, D. E., & Canggih, C. (2023). Does Merger Affect BRIS Stock Performance? A Comparative Analysis. Jurnal Ekonomi Syariah Teori dan Terapan, 10(1).
- Nurafini, F. (2022). Studi Perbandingan Tingkat Kesehatan Bank Antara Bank Syariah dan Bank Konvensional di Indonesia Selama Pandemi Covid-19. Jurnal Ilmiah Ekonomi Islam, 8(3), 2690-2699.
- 3. Canggih, C., Nurafini, F., Suryaningsih, S. A., Fikriyah, K., Indrarini, R., & Susilowati, F. D. (2022). ARE ISLAMIC BANKS STILL SOUND AMIDST PANDEMIC?. EL DINAR: Jurnal Keuangan dan Perbankan Syariah, 10(2), 114-129.

Supporting lecturer

Clarashinta Canggih, S.E., CIFP. Yan Putra Timur, S.M., M.SEI. Rachma Indrarini, S.EI., M.SEI. Fira Nurafini, S.EI., M.SEI.

Week-	Final abilities of each learning stage	Evalı	uation	Lear Stude	elp Learning, rning methods, ent Assignments, stimated time]	Learning materials [References	Assessment Weight (%)
	(Sub-PO)	Indicator	Criteria & Form	Offline (offline)	Online (online)]	
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
	Examining the meaning of statistics	1.Able to study the meaning of statistics 2.Able to examine types of statistics 3.Able to examine types of data in statistics	Criteria: Participation Scoring Guidelines Form of Assessment: Participatory Activities	Studying; Case Based Learning 3 X 50		Material: 1. Understanding Statistics 2. Division of Statistics 3. Descriptive Statistics and Inferential Statistics 4. Division of Inferential Statistics 5. Parametric and Non- Parametric Statistics 6. Types of data References: Lind, Douglas A. Marchal, William G. and Wathen, Samuel A. 2018. Statistical Techniques in Business and Economics (Ed15). Books 1 and 2. Salemba Empat Publishers Material: 1. Understanding Statistics 2. Division of Statistics 3. Descriptive Statistics and Inferential Statistics 4. Division of Inferential Statistics 5. Parametric and Non- Parametric Statistics 6. Types of data References:	4%

						Lind, Douglas A. Marchal, William G. and Wathen, Samuel A. 2020. Statistical Techniques in Business and Economics: 18th edition. McGraw-Hill Education Material: 1. Understanding Statistics 2. Division of Statistics 3. Descriptive Statistics and Inferential Statistics 4. Division of Inferential Statistics 5. Parametric and Non- Parametric statistics 6. Types of data Library: Indrarini, Rachma; Sophisticated, Clarashinta; Nurafini, Fira, Maryam. 2023. STATISTICS FOR ISLAMIC ECONOMICS 1. Nizamia Learning Center.	
2	Analyze frequency distribution tables and diagrams	1. Able to make a frequency table 2. Able to create frequency distributions 3. Able to make diagrams: histogram, bar graph, pie chart, polygon, ogive, pictogram 4. Able to analyze frequency distribution results and diagrams	Criteria: Participation Assessment Rubric Form of Assessment: Participatory Activities	Studying; Case Based (Case Study - LKM) 3 X 50	3 X 50	Material: 1. Frequency distribution table 2. One- way and two- way distribution table 3. Bibliography diagram: Indrarini, Rachma; Sophisticated, Clarashinta; Nurafini, Fira, Maryam. 2023. STATISTICS FOR ISLAMIC ECONOMICS 1. Nizamia Learning Center. Materials: 1. Frequency table 2. Frequency table 2. Frequency distribution 3. Bibliography diagram: Lind, Douglas A. Marchal, William G. and Wathen, Samuel A. 2020. Statistical Techniques in Business and Economics: 18th edition. McGraw-Hill Education	4%

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3	Analyze measures of central tendency of data	1.Able to calculate and analyze mean, median, mode for group data 2.Able to calculate and analyze mean, median, mode for ungrouped data	Criteria: Quiz Grading Rubric Form of Assessment: Participatory Activities	Lectures, Problem Based Learning - Doing Case Studies (LKM) 3 X 50	Material: 1. Median, 2. Mode, 3. Percentiles, 4. Deciles, 5. Quartiles Literature: Suharyadi & Purwanto, SK. 2015. Statistics for Modern Economics & Finance (ed 3). Volume 1 Material: 1. Mean 2. Median 3. Mode References: Lind, Douglas A. Marchal, William G. and Wathen, Samuel A. 2022. BASIC STATISTICS FOR BUSINESS AND ECONOMICS: 10th edition. McGraw-Hill Education Material: 1. Percentiles, 2. Deciles, 3. Quartiles Literature: Indrarini, Rachma; Sophisticated, Clarashinta; Nurafini, Fira, Maryam. 2023. STATISTICS FOR ISLAMIC ECONOMICS 1. Nizamia Learning Center. Material: 1. Mean 2. Median 3. Mode References: Lind, Douglas A. Marchal, William G. and Wathen
					Mean 2. Median 3. Mode References: Lind, Douglas A. Marchal, William G. and Wathen, Samuel A. 2020. Statistical Techniques in Business and Economics:
					18th edition. McGraw-Hill Education

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4	Analyze measures of data dispersion	1.Able to calculate: Percentiles, Deciles, Quartiles, Range, Quartile Range, Semi-quartile Range 2.Able to calculate and analyze Range, Variance and Standard Deviation 3.Able to calculate and analyze measures of skewness and kurtosis	Criteria: Assignment Grading Rubric Form of Assessment: Portfolio Assessment	Lectures, Problem Based Learning and Case Studies (Case Based Learning) 3 X 50	Material: 1. Relative Spread Measures 2. Other Spreac Measures 3. Skewness 4. Kurtosis, References: Suharyadi & Purwanto, Sk 2015. Statistics for Modern Economics & Finance (ed 3). Volume 1 Material: 1. Measures of Relative Spread 2. Other Measures of Spread 3. Skewness 4. Kurtosis Bibliography Lind, Dougla: A. Marchal, William G. an Wathen, Samuel A. 2020. Statistical Techniques in Business and Economics: 18th edition. McGraw-Hill Education	r: Si d
5	Analyze various types of Index Numbers	Analyze various types of index numbers (simple, aggregate simple, paasche, laspeyres, fisher, marshal edgeworth, value)	Criteria: Participation Assessment Rubric Form of Assessment : Participatory Activities	Lectures, Problem Based Learning and Case Studies (Case Based Learning) 3 X 50	Material: index numbers (simple, simple aggregate, paasche, laspeyres, fisher, marshal edgeworth, value) References: Suharyadi & Purwanto, Sk 2015. Statistics for Modern Economics & Finance (ed 3). Books 1 and 2. Salemba Empat Publishers	.

6	Analyzing periodic series and forecasting (time series / trends)	1.Analyzing types of time series analysis 2.Analyzing linear trends 3.Analyzing non-linear trends	Criteria: Assignment Grading Rubric Form of Assessment: Portfolio Assessment	Lectures, Problem Based Learning and Case Studies (Case Based Learning) 3 X 50	WAG (Discussion) Google Meet (Materials and Case Studies)	Material: Time Series Analysis Bibliography: Lind, Douglas A. Marchal, William G. and Wathen, Samuel A. 2020. Statistical Techniques in Business and Economics: 18th edition. McGraw-Hill Education Material: Time Series Analysis Bibliography: Suharyadi & Purwanto, SK. 2015. Statistics for Modern Economics & Finance (ed 3). Books 1 and 2. Salemba	7%
						Salemba Empat Publishers	
7	Analyzing Periodic Series/Time Series	1.Examining the meaning of Probability 2.Examining the types of probability 3.Examine the rules for calculating probability 4.Analyzing the probability value of an event	Criteria: Participation Assessment Rubric Form of Assessment: Participatory Activities	Lectures and Quizzes 3 X 50	WAG (Discussion) Google Meet (Materials and Quizzes)	Material: Probability References: Lind, Douglas A. Marchal, William G. and Wathen, Samuel A. 2020. Statistical Techniques in Business and Economics: 18th edition. McGraw-Hill Education Material: Probability Bibliography: Lind, Douglas A. Marchal, William G. and Wathen, Samuel A. 2018. Statistical Techniques in Business and Economics (Ed15). Books 1 and 2. Salemba Empat Publishers	5%

8	1 =,,	Exam Papers	Criteria:	UTS			15%
	1.Examining probability 2.Create distribution tables and diagrams 3.Analyze measures of central tendency of data 4.Analyze measures of data dispersion 5.Analyze various types of Index Numbers 6.Analyzing periodic series and forecasting (time series / trends) 7.Examining probability	2 4010	UTS Assessment Rubric Form of Assessment : Test	3 X 50			137/
9	Measuring sampling and sampling distribution	1.Understand the meaning of Sampling Distribution 2. Understanding probability samples 3.Analyzing on Probability Samples 4.Analyze the sampling distribution of the mean 5.Analyze the sampling distribution of proportions 6.Analyze sampling distribution of differences and sums	Criteria: Assignment Grading Rubric Form of Assessment: Portfolio Assessment	Lectures, Discussions and Working on Case Studies (LKM) 3 X 50		Material: Sampling and sampling distribution References: Indrarini, Rachma; Sophisticated, Clarashinta; Nurafini, Fira, Maryam. 2023. STATISTICS FOR ISLAMIC ECONOMICS 1. Nizamia Learning Center. Material: Sampling and sampling distribution Reference: Suharyadi & Purwanto, SK. 2015. Statistics for Modern Economics & Finance (ed 3). Books 1 and 2. Salemba Empat Publishers	3%
10	Analyze statistical estimates	1.Understand and analyze the meaning and basic concepts of estimation 2.Understand and analyze Population Mean estimates 3.Understand and analyze population percentage estimates 4.Understand and analyze Population variance estimates	Criteria: Participation Assessment Rubric Form of Assessment: Participatory Activities	Lectures and Case Studies (Case Based Learning) 3 X 50	WAG (Discussion) Google Meet (Materials and Case Studies)	Material: Concept of basic estimation, estimating the mean, estimating population percentages and estimating population variance. References: Suharyadi & Purwanto, SK. 2015. Statistics for Modern Economics & Finance (ed 3). Books 1 and 2. Salemba Empat Publishers	6%

11 Analyzing	1 Undovetor d	Critoria:	Lactures	Material	606
11 Analyzing Hypothesis Testing	1.Understand the meaning of hypothesis 2.Understand the formulation of Hypothesis 3.Understand the General steps in Hypothesis Testing 4.Understand and analyze hypothesis testing regarding the mean with Large Samples (n≥30) 5.Understand and analyze hypothesis testing regarding the mean with Samples (n≥30) 5.Understand and analyze hypothesis testing regarding the mean with Small Samples (n	Criteria: Participation Assessment Rubric Form of Assessment: Participatory Activities	Lectures and Case Studies (Case Based Learning) 3 X 50	Material: Hypothesis Testing References: Lind, Douglas A. Marchal, William G. and Wathen, Samuel A. 2020. Statistical Techniques in Business and Economics: 18th edition. McGraw-Hill Education Material: Hypothesis Testing References: Suharyadi & Purwanto, SK. 2015. Statistics for Modern Economics & Finance (ed 3). Books 1 and 2. Salemba Empat Publishers Material: Hypothesis Testing References: Subagyo, Pangestu. 2012. Descriptive Statistics. Yogyakarta: BPFE	6%

12	Analyze				
	Hypothesis Testing, Variance Analysis, Chi Square Test and other non- parametric statistics	1.Able to understand and analyze hypothesis testing regarding proportions 2.Able to understand and analyze Two Mean Difference Hypothesis tests with Large Samples (n1; n2 ≥30) 3.Able to understand and analyze Two Mean Difference Hypothesis tests with Samples (n1; n2 ≥30) 4.Able to understand and analyze Two Mean Difference Hypothesis tests with Small Samples (n1; n2 < 30) 4.Able to understand and analyze Two Mean Difference Hypothesis tests for Paired Observations 5.Able to understand and analyze the Two Proportion	Criteria: Participation Assessment Rubric Form of Assessment: Participatory Activities	Studying; Doing Case Studies (LKM) - Case Based 3 X 50	Material: Hypothesis Testing, Variance Analysis, Chi square test, Mann-Whitney test, Wilcoxon test, Friedman test and Kruskal-Wallis test Reader: Sugiyono. 2016. Statistics for Research. Alphabeta Publisher: Bandung Material: Hypothesis Testing, Variance Analysis, Chi square test, Mann-Whitney test, Wilcoxon test, Friedman test and Kruskal-Wallis test References: Lind, Douglas A. Marchal, William G. and Wathen, Samuel A. 2017. Statistical Techniques in Business and Economics,
		Proportion Difference Hypothesis test			

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13	Analyze Analysis of Variance, Chi Square Test and other non-parametric statistics	1.Able to understand the meaning of Variance Analysis 2.Able to understand and analyze One Way Anova 3.Able to understand and analyze two-way Anova	Criteria: Participation Assessment Rubric Form of Assessment: Participatory Activities	Lecture and Doing Case Studies (LKM) - Problem Based Learning 3 X 50	WAG (Discussion) Google Meet (Materials and Case Studies)	Material: Hypothesis Testing, Variance Analysis, Chi square test, Mann-Whitney test, Wilcoxon test, Friedman test and Kruskal-Wallis test Reader: Sugiyono. 2016. Statistics for Research. Alphabeta Publisher: Bandung Material: Hypothesis Testing, Variance Analysis, Chi square test, Mann-Whitney test, Wilcoxon test, Friedman test and Kruskal-Wallis test References: Lind, Douglas A. Marchal, William G. and Wathen, Samuel A. 2017. Statistical Techniques in Business and Economics, 17th Edition. McGraw-Hill Education	5%

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14	Analyze Analysis of Variance, Chi Square Test and other non-parametric statistics	1.Able to understand the meaning of Variance Analysis 2.Able to understand and analyze One Way Anova 3.Able to understand and analyze two-way Anova 4.Able to understand the meaning of the Chi Square test 5.Able to calculate, understand and analyze Chi Square values	Criteria: Assignment Grading Rubric Form of Assessment : Portfolio Assessment	Studying; Doing Case Studies (Problem Based) 3 X 50	Material: Hypothesis Testing, Variance Analysis, Chi square test, Mann-Whitney test, Wilcoxon test, Friedman test and Kruskal-Wallis test Reader: Sugiyono. 2016. Statistics for Research. Alphabeta Publisher: Bandung Material: Hypothesis Testing, Variance Analysis, Chi square test, Mann-Whitney test, Wilcoxon test, Friedman test and Kruskal-Wallis test References: Lind, Douglas A. Marchal, William G. and Wathen, Samuel A. 2017. Statistical Techniques in Business and Economics, 17th Edition. McGraw-Hill Education	%

15	Analyze Analysis	4	Criteria:	Lectures	1	Material:	5%
	of Variance, Chi Square Test and other non- parametric statistics	1.Able to understand and analyze the Mann- Whitney test 2.Able to understand and analyze the Wilcoxon test 3.Able to understand and analyze the Friedman test 4.Able to understand and analyze the Kruskal- Wallis test	Participation Assessment Rubric Form of Assessment: Participatory Activities	and Case Based Learning 3 X 50		Hypothesis Testing, Variance Analysis, Chi square test, Mann-Whitney test, Wilcoxon test, Friedman test and Kruskal-Wallis test Reader: Sugiyono. 2016. Statistics for Research. Alphabeta Publisher: Bandung Material: Hypothesis Testing, Variance Analysis, Chi square test, Mann-Whitney test, Wilcoxon test, Friedman test and Kruskal-Wallis test References: Lind, Douglas A. Marchal, William G. and Wathen, Samuel A. 2017. Statistical Techniques in Business and Economics, 17th Edition. McGraw-Hill Education	
16	1.Measuring sampling and sampling distribution 2.Analyze statistical estimates 3.Analyzing Hypothesis Testing 4.Analyze Hypothesis Testing, Variance Analysis, Chi Square Test and other nonparametric statistics	Exam Papers	Criteria: UAS Assessment Rubric Form of Assessment: Test	UAS	UAS		15%

Evaluation Percentage Recap: Case Study

No	Evaluation	Percentage
1.	Participatory Activities	50%
2.	Portfolio Assessment	20%
3.	Test	30%
		100%

Notes

- Learning Outcomes of Study Program Graduates (PLO Study Program) are the abilities possessed by each Study
 Program graduate which are the internalization of attitudes, mastery of knowledge and skills according to the level of
 their study program obtained through the learning process.
- 2. The PLO imposed on courses are several learning outcomes of study program graduates (CPL-Study Program) which are used for the formation/development of a course consisting of aspects of attitude, general skills, special skills and

knowledge.

- 3. **Program Objectives (PO)** are abilities that are specifically described from the PLO assigned to a course, and are specific to the study material or learning materials for that course.
- 4. Subject Sub-PO (Sub-PO) is a capability that is specifically described from the PO that can be measured or observed and is the final ability that is planned at each learning stage, and is specific to the learning material of the course.
- Indicators for assessing abilities in the process and student learning outcomes are specific and measurable statements that identify the abilities or performance of student learning outcomes accompanied by evidence.
- 6. **Assessment Criteria** are benchmarks used as a measure or measure of learning achievement in assessments based on predetermined indicators. Assessment criteria are guidelines for assessors so that assessments are consistent and unbiased. Criteria can be quantitative or qualitative.
- 7. Forms of assessment: test and non-test.
- 8. **Forms of learning:** Lecture, Response, Tutorial, Seminar or equivalent, Practicum, Studio Practice, Workshop Practice, Field Practice, Research, Community Service and/or other equivalent forms of learning.
- Learning Methods: Small Group Discussion, Role-Play & Simulation, Discovery Learning, Self-Directed Learning, Cooperative Learning, Collaborative Learning, Contextual Learning, Project Based Learning, and other equivalent methods.
- 10. Learning materials are details or descriptions of study materials which can be presented in the form of several main points and sub-topics.
- 11. The assessment weight is the percentage of assessment of each sub-PO achievement whose size is proportional to the level of difficulty of achieving that sub-PO, and the total is 100%.
- 12. TM=Face to face, PT=Structured assignments, BM=Independent study.