DESCRIPTION OF COURSE UNIT

according to the ECTS User's Guide 2015

Course unit title	Statistics in Education
Course unit code	22010111C05
Type of course unit (compulsory, optional)	Compulsory
Level of course unit (according to EQF: first cycle Bachelor, second cycle Master)	Bachelor
Year of study when the course unit is delivered (if applicable) 2021/2022 Semester/trimester	1st Year
Semester/trimester when the course unit is delivered	First Semester
Number of ECTS credits allocated	2.88 ECTS 2 credits equal to 2.88 ECTS. (1 ECTS = 27.5 hours per semester) In total 2.88 x 27.5 hours per semester = 79,2 hours per semester
Name of lecturer(s)	Sulistya Umie Ruhmana Sari, M.Si
Learning outcomes of the course unit	CLO-1: Able to formulate basic concepts. Basic understanding of statistics and statistics, benefits and uses of statistics CLO-2: Able to design Data and Variables, Population and Sample., Measurement Scales (Nominal, Ordinal, Interval, and Ratio), Descriptive Analysis / Measurement of Central Symptoms (Mean, Median, Mode), Descriptive Analysis / Deviation Measurement (Range, Standard Deviation, Variance), Skewness and Kurtosis, Measurement Scales (Nominal, Ordinal, Interval and Ratio) CLO-3: Able to interpret Technology in Statistical Data Processing, Hypothesis Formulation and Testing, Chi-Square statistical test requirements, Correlation Test (Pearson Product Moment Correlation and Regression), T-Test (T-Test) CLO-4: Able to formulate isolated and integrated
Mode of delivery (face-to-face, distance learning)	Face to face
Prerequisites and co-requisites (if applicable)	

Course Content	1. Basic concepts Basic understanding of statistics and statistics, 2. Benefits and uses of statistics 3. Data and Variables, Population and Sample 4. Measurement Scales (Nominal, Ordinal, Interval, and Ratio) 5. Data Processing, Data Presentation, and Frequency Distribution 6. Descriptive Analysis / Central Symptom Measurement (Mean, Median, Mode) 7. Descriptive Analysis / Deviation Measurement (Range, Standard Deviation, Variance) 8. Skewness and Kurtosis 9. Technology in Statistical Data Processing 10. Hypothesis Formulation and Testing 11. Chi-Square statistical test requirements 12. Correlation test (Pearson Product Moment Correlation and Regression) 13. T-Test
Recommended or required reading and other learning resources/tools	1. Irianto, A. (1988). Statistik Pendidikan (1). Jakarta: Depdikbud 2. Sari, Sulistya Umie Ruhmana (2021) The Effectiveness of statistics software training to improve the understanding of quantitative research methodology concepts for students of Tadris Mathematics, Faculty of Tarbiyah and Teacher Training, UIN Maulana Malik Ibrahim Malang. Presented at ICONETOS 2020 – the International Conference on Engineering, Technology and Social Science, 31 October 2020, LP2M UIN Maulana Malik Ibrahim Malang 3. Sari, Sulistya Umie Ruhmana and Sasongko, Dimas Femy (2021) Factors that influence students' readiness in face-to-face learning setting in post Covid-19 pandemic through ordinal logistic rough regression. Presented at International Conference on Islamic Education (ICIED), 15 Nov 2021, Malang. 4. Sari, Sulistya Umie Ruhmana and Irawan, Wahyu Henky and Sasongko, Dimas Femy and Mukmin, Muhammad Islahul (2020) Aplikasi statistika berbasis software pada penelitian pengembangan integratif Sains-Islam. UIN Maliki Press, Malang. ISBN 978-623-232-678-1 UNSPECIFIED: UNSPECIFIED. Item availability may be restricted.
Planned learning activities and teaching methods	Lecture, Group discussion, Simulation, Project Based Pbl
Language of instruction	Indonesian
Assessment methods and criteria	There are Assignments, Midterms, Final Examinations, and Presentation, Observation

DISCUSSION ASSESSMENT GUIDELINES

Course Name : _____

Name of Lecturer : _____

Departement : Islamic Religious Education

A. Assessment Rubric

No.	Assessment Criteria and Substances	Scoring and Indicators				
		1	**2**	**3**	**4**	**5**
1	**Active Participation** (25%)	Not participating in the discussion	Participation is minimal and irrelevant	Very minimal participation but quite relevant	Moderately active participation, but less relevant	Very active and relevant participation
2	**Material Understanding** (25%)	Not understanding the material	Very little understanding and unable to analyze the material	Good understanding but unable to analyze	Minimal understanding, but can analyze well	Excellent and thorough understanding and can analyze well.
3	**Argumentative Ability** (20%)	Unable to argue	Arguments are feeble and irrelevant	Good enough argument, but not relevant	Arguments are strong and relevant, but not yet able to defend their opinions.	Arguments are strong and relevant and can defend their opinions.
4	**Listening Skills** (15%)	Having no desire to listen	Occasional listening and often ignorance of surroundings	Good listening, but less responsive	Listened well and was responsive, but interrupted several times.	Excellent listening and responsiveness

5	**Teamwork** (15%)	Not cooperating with the group	Cooperates with certain group members but is passive	Actively cooperates with certain group members but refuses to cooperate with other group members	Actively cooperates with all group members but is less efficient	Actively collaborate with all group members and work together efficiently

B. Compilation of Final Grade

The final score is obtained using the following formula:

Final score =

- $_{i}$ score is the score obtained by the student on the i-th task
- Subtances$_{i}$ is the weight (in fractional form) of the i-th task
- The sum is done for all indicators, from indicators 1 to 5.

C. SCORING GUIDELINES

The scoring guidelines are as follows:

No.	Category	Value Range
1	Excellent	86-100
2	Good	70-85
3	Average	50-69
4	Deficient	25-49
5	Unsatisfactory	<25

D. Assessment Sheet

DISCUSSION ASSESSMENT SHEET

Student Name : _____

NIM : _____

Group Name : _____

Class : _____

Course Content : _____

Lecturer : _____

Assessment Date : _____

Ninth Meeting : _____

No.	Assessment Criteria and Substances	Checklist Column					Total Score
		1	2	3	4	5	
1	**Active Participation** (25%)						
2	**Material Understanding** (25%)						
3	**Argumentative Ability** (20%)						
4	**Listening Skills** (15%)						
5	**Teamwork** (15%)						
Total Final Score							
Grade to Letter Conversion							
Value Category							

Malang, _____

Lecturer

_____

MATRIX CALCULATION
FINAL COURSE SCORE
DEPARTMENT OF ISLAMIC EDUCATION

A. Assessment Aspects

Assessment Aspect					
Cognitive (Substance 60%)				Affective (Substance 20%)	Psychomotor (Substance 20%)
Papers/Essay/ Articles/Book Review/Article Review/Portfolio/Mind Map (Substance 20%)	Discussion/Presentation/Observation/Case Study/Project (Substance 20%)	Midterm Exams (Substance 30%)	Final Exams (Substance 30%)	Assessment of Attitude (Observation/Self-Assessment/Peer Assessment)	Practice

B. Final Course Score Calculation

Na = Cognitive Aspect Score (CA)+ Affective Aspect Score (AA)+ Psychomotor Aspect Score (PA)

$$Na = CA\left(\begin{array}{c}\left(Midterm\ Exam\ Score\ x\ \frac{30}{100}\right)+\left(Final\ Exam\ Score\ x\ \frac{40}{100}\right)+\\ Task\ Accumulation\ I(\sum_{i=1}^{n} Score_i\ x\ \frac{15}{100})+\\ Task\ Accumulation\ I(\sum_{i=1}^{n} Score_i\ x\frac{15}{100})\end{array}\right) x\ \frac{60}{100}+AA\,x\frac{20}{100}+PA\,x\frac{20}{100}$$

Note: n = total task

I = 1st score

C. Guidelines for Score Conversion

The scoring guidelines are outlined as follows:

No	Category	Grade
1	Excellent	86-100
2	Good	70-85
3	Average	50-69
4	Deficient	25-49
5	Unsatisfactory	<25