



UNIVERSITAS NEGERI PADANG
FACULTY OF MATHEMATICS AND NATURAL SCIENCES
MATHEMATICS DEPARTMENT, MATHEMATICS EDUCATION STUDY PROGRAM
Main Campus Universitas Negeri Padang.
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Bachelor of Mathematics Education**MODULE HANDBOOK**

Module name:	Elementary Statistics
Module level, if applicable:	Bachelor
Code:	MAT1.61.3302
Sub-heading, if applicable:	-
Classes, if applicable:	Elementary Statistics
Semester:	3 rd (third)
Module coordinator:	Dra. Fitrani Dwina, M.Ed.
Lecturer(s):	Dra. Fitrani Dwina, M.Ed., and Team
Language:	Bahasa Indonesia and English
Classification within the curriculum:	Study Program Compulsory Course
Teaching format / class hours per week during the semester:	<p>Teaching format:</p> <ul style="list-style-type: none">• Lectures (Face to face activities): expository, problems-based learning, and Class discussion methods• Structured assignment• Independent activities• Practice <p>4 x 170 minutes = 680 minutes = 11.33 hours</p>
Workload:	<p>16 weeks per semester include Midterm Exam and Final Exam which consist of:</p> <ul style="list-style-type: none">• 2.50 hours lectures (3 x 50 minutes) per week• 3 hours structured assignments (3x 60 minutes) per week• 3 hours independent activities (3 x 60 minutes) per week• 2.83 hours practice (1 x 170 minute) per week <p>16 x 170 x 4 = 10880 minutes = 181.33 hours = 6.04 ECTS</p>
Credit points:	4 SKS (6.04 ECTS)
Prerequisites course(s):	-

Course outcomes:	<p>After taking this course the students have ability to:</p> <p>CO1 : explain the concept of descriptive statistics, probability, probability distributions, inferential statistics, analysis of variance, regression analysis, and correlation analysis</p> <p>CO2 : apply the concept of descriptive statistics, probability, probability distributions, inferential statistics, analysis of variance, regression analysis, and correlation analysis</p> <p>CO 3 : analyze the problems that connect to the concept of descriptive statistics, probability, probability distributions, inferential statistics, analysis of variance, regression analysis and correlation analysis.</p> <p>CO 4 : show responsibility attitude towards works by self and by team works</p>
Content:	<p>This course discusses:</p> <ol style="list-style-type: none"> 1. basic concepts of statistics: understanding statistics, types of statistics, data and measurements, population and samples, as well as parameters and statistics. 2. descriptive statistical analysis: presentation of data using tables and graphs, measure of concentration, measure of diversity, and measure of location. 3. calculate probability: counting sample points, empirical probability and theoretical probability, laws of probability, conditional probability and independent events, bayes rule. 4. some important distributions: normal distribution, t distribution, f distribution, and chi-square distribution. 5. inferential statistical analysis: parameter estimation and hypothesis testing about mean, proportion, and variance 6. analysis of variance: one-way analysis of variance and multiple comparison test 7. regression and linear correlation.
Study/exam achievements:	<p>Total Score = (30% x Midterm Exam Score) + (30% x Final Exam Score) + (35% x Assignment) + (5% x Affective Score (Responsibility, Participation, class attendance))</p> <p>The initial cut - off points for grades A, A-, B+, B, B-, C+, C, C-, and D should not be less than 85, 80, 75, 70, 65, 60, 55, 50, and 40 out of 100 respectively.</p> <p>Explanation:</p> <p>1. Midterm Exam</p> <ul style="list-style-type: none"> ✓ Midterm Exam will be conducted in the 9th meeting ✓ Midterm Exam is in the form of a written test (essay) and will be conducted in the classroom ✓ The time allocation is 120 minutes according to the module schedule <p>2. Final Exam</p> <ul style="list-style-type: none"> ✓ Final Exam will be conducted in the 16th meeting. ✓ Final Exam is in the form of a written test (essay) and will

	<p>be conducted in the classroom.</p> <ul style="list-style-type: none"> ✓ The time allocation is 120 minutes which follows the Final Examschedule provided by the Department. <p>3. Assignment</p> <ul style="list-style-type: none"> ✓ Assignments are given as exercise before midterm exam and before final exam ✓ Assignments were about analyzing problem in daily life and solve it with the concept of the content in Elementary Statistics ✓ Assignments are given as individual task and it is in form Quiz, Homework, etc and it is assessed by rubric assessment ✓ The assignment was carried out to see the achievements of the PLO and CO which are in accordance with the characteristics of Elementary Statistics module <p>4. Affective Assessment</p> <ul style="list-style-type: none"> ✓ Affective assessment is held in every meeting by observing students' attitude in the classroom. ✓ The assesment is based on the observation sheet by using the given scoring rubrics.
Forms of media:	Board, LCD Projector, Laptop/Computer
Literature:	<ol style="list-style-type: none"> 1. Walpole, RE. (2017). <i>Pengantar Statistika</i>. (Alih Bahasa: Bambang Sumantri). Jakarta: Gramedia. 2. Schlotzhauer, S. D. (2015). <i>Elementary statistics using SAS</i>. SAS Institute. 3. Neave, H. R. (2013). <i>Elementary statistics tables</i>. Routledge. 4. Bluman. Allan. G. (2012). <i>Elementary Statistics: A Step-by-Step Approach</i>. 6th Edition. New York: McGraw-Hill Compenies. 5. Johnson, R. R., & Kuby, P. J. (2011). <i>Elementary statistics</i>. Cengage Learning. 6. Syafriandi. (2010). <i>Statistika Dasar (Buku Ajar)</i>, DIP UNP. Padang.

PLO and CO mapping

	PLO1	PLO2	PLO3	PLO4	PLO5	PLO6	PLO7	PLO8	PLO9	PLO10	PLO11
CO1	✓										
CO2	✓										
CO3	✓										
CO4									✓		