



**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 <sup>rd</sup> (third)
Module coordinator:	Dra. Fitriani Dwina, M.Ed.
Lecturer(s):	Dra. Fitriani 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"> <li>• Lectures (Face to face activities): expository, problems-based learning, and Class discussion methods</li> <li>• Structured assignment</li> <li>• Independent activities</li> <li>• Practice</li> </ul> <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"> <li>• 2.50 hours lectures (3 x 50 minutes) per week</li> <li>• 3 hours structured assignments (3x 60 minutes) per week</li> <li>• 3 hours independent activities (3 x 60 minutes) per week</li> <li>• 2.83 hours practice (1 x 170 minute) per week</li> </ul> <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"> <li>1. basic concepts of statistics: understanding statistics, types of statistics, data and measurements, population and samples, as well as parameters and statistics.</li> <li>2. descriptive statistical analysis: presentation of data using tables and graphs, measure of concentration, measure of diversity, and measure of location.</li> <li>3. calculate probability: counting sample points, empirical probability and theoretical probability, laws of probability, conditional probability and independent events, bayes rule.</li> <li>4. some important distributions: normal distribution, t distribution, f distribution, and chi-square distribution.</li> <li>5. inferential statistical analysis: parameter estimation and hypothesis testing about mean, proportion, and variance</li> <li>6. analysis of variance: one-way analysis of variance and multiple comparison test</li> <li>7. regression and linear correlation.</li> </ol>
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><b>Explanation:</b></p> <ol style="list-style-type: none"> <li><b>1. Midterm Exam</b> <ul style="list-style-type: none"> <li>✓ Midterm Exam will be conducted in the 9<sup>th</sup> meeting</li> <li>✓ Midterm Exam is in the form of a written test (essay) and will be conducted in the classroom</li> <li>✓ The time allocation is 120 minutes according to the module schedule</li> </ul> </li> <li><b>2. Final Exam</b> <ul style="list-style-type: none"> <li>✓ Final Exam will be conducted in the 16<sup>th</sup>meeting.</li> <li>✓ Final Exam is in the form of a written test (essay) and will</li> </ul> </li> </ol>

