



Master Program of Science Education

Module Handbook

<i>Module Name :</i>	<i>Statistika/ Statistics</i>
<i>Module level :</i>	<i>Master Program of Science Education</i>
<i>Course Code :</i>	<i>8410102169</i>
<i>Abbreviation, if applicable:</i>	<i>-</i>
<i>Courses included in the module, if applicable:</i>	<i>Not Applicable</i>
<i>Semester/Term</i>	<i>1st /First Year</i>
<i>Module coordinator(s)</i>	<i>Prof. Dr. Erman, M.Pd.</i>
<i>Lecturer(s):</i>	<i>Prof. Dr. Erman, M.Pd. Prof. Dr. Suyono, M.Pd. Prof Nadi Suprpto, PhD. Prof. Dr. Ahmad Lutfi, M.Pd.</i>
<i>Language:</i>	<i>Indonesian Language</i>
<i>Classification within the curriculum:</i>	<i>Compulsory/ Elective</i>
<i>Teaching format/class hours per week during the semester:</i>	<i>2 contact hours of lectures (Indonesia credit semester or CU*)</i>
<i>Workload :</i>	<i>2 x 50 minutes lectures, 2 x 90 minutes structured activity, 2 x 100 minutes individual activity, 14 weeks per semester, 112 total hours per semester ~ 4.48 ECTS**</i>
<i>Credit Point:</i>	<i>2 CU (4.48 ECTS)</i>
<i>Requirements:</i>	
<i>Learning goals/competencies:</i>	<p>Skill (SKI-1) CLO-1 Able to developing statistical techniques to process data.</p> <p>Skill (SKI-2) CLO-2 Able to solve data in the context of solving science education problems.</p>
<i>Content</i>	<i>This course aims to enable students to apply appropriate statistical techniques to process data in addition to in-depth discussion and conceptual development associated with quantitative and qualitative approaches that are focused on various statistical techniques that are widely used in science education research, both qualitative and quantitative research. Through this course, students are expected to have scientific thinking suggestions to map and analyze science education problems to find the right solution. Lectures are</i>



	<i>conducted in lectures, questions and answers, discussions, and chapter report with presentation of results.</i>																														
<i>Attribute Soft skill:</i>	<i>Scientific report, public speaking, and team work</i>																														
<i>Study/exam achievements:</i>	<p><i>Students are considered to be competent and pass if at least get 70. Final score is calculated as follows: 20% Participation + 30% Assignment + 20% Middle Exam (UTS) + 30% Final Exam (UAS)</i></p> <p>Final index is defined as follow:</p> <table border="1" style="margin-left: auto; margin-right: auto;"> <thead> <tr> <th><i>Index</i></th> <th><i>Converted Score</i></th> <th><i>Score Range</i></th> </tr> </thead> <tbody> <tr> <td>A</td> <td>4.00</td> <td>$85 \leq A \leq 100$</td> </tr> <tr> <td>A-</td> <td>3.75</td> <td>$80 \leq A- < 85$</td> </tr> <tr> <td>B+</td> <td>3.50</td> <td>$75 \leq B+ < 80$</td> </tr> <tr> <td>B</td> <td>3.00</td> <td>$70 \leq B < 75$</td> </tr> <tr> <td>B-</td> <td>2.75</td> <td>$65 \leq B- < 70$</td> </tr> <tr> <td>C+</td> <td>2.50</td> <td>$60 \leq C+ < 65$</td> </tr> <tr> <td>C</td> <td>2.00</td> <td>$55 \leq C < 60$</td> </tr> <tr> <td>D</td> <td>1.00</td> <td>$40 \leq D < 55$</td> </tr> <tr> <td>E</td> <td>0.00</td> <td>$0 \leq E < 40$</td> </tr> </tbody> </table>	<i>Index</i>	<i>Converted Score</i>	<i>Score Range</i>	A	4.00	$85 \leq A \leq 100$	A-	3.75	$80 \leq A- < 85$	B+	3.50	$75 \leq B+ < 80$	B	3.00	$70 \leq B < 75$	B-	2.75	$65 \leq B- < 70$	C+	2.50	$60 \leq C+ < 65$	C	2.00	$55 \leq C < 60$	D	1.00	$40 \leq D < 55$	E	0.00	$0 \leq E < 40$
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<i>Learning Methods :</i>	<i>Case Method, Discussion, and Article Review</i>																														
<i>Form of Media:</i>	<i>Power Point slides, e-book file, and multimedia.</i>																														
<i>Literature (primary references):</i>	<ol style="list-style-type: none"> 1. Kaiser, M. S. (2005). <i>Advance statistical methods lowa</i>. State University: Departement of Statistics. 2. Coletti, P. (2010). <i>Advanced statistis</i>. Free Univeristy of Bolzano Bozen. 3. Shalizi, C.R. (2013). <i>Advance data analiysis</i>. Cosma Rohilla Spring 2013. 4. Qian, J. (2012). <i>An introduction to advanced probability and statistics</i>. China, junhuig@gmail.com 5. Imam Ghozali . (2019). <i>Buku Statistik NON Parametrik</i>. Undip 6. Ardianto dan Kadir. 2021. <i>Buku Aplikasi Statistik dalam Penelitian</i> 																														
<i>Notes:</i>	<p><i>*1 CU in learning process = three periods consist of: (a) scheduled instruction in a classroom (50 minutes); (b) structured activity (90 minutes); and (c) individual activity (100 minutes) according to according to Rector Decree of Universitas Negeri Surabaya No. 598/UN38/HK/AK/2020</i></p> <p><i>**1 CU = 2.24 ECTS according to Rector Decree of Universitas Negeri Surabaya No. 598/UN38/HK/AK/2020</i></p> <p><i>*Total ECTS = (total hours workload/ 60 min) / 25 hours</i></p> <p>Each ECTS is equals with 25 hours</p>																														
<i>Last Amendment</i>	<i>5 January 2023</i>																														