

Module designation	<i>Statistical Computing</i>
Semester(s) in which the module is taught	5
Person responsible for the module	<i>Retno Subekti, M.Sc.</i>
Language	<i>Bahasa Indonesia</i>
Relation to curriculum	<i>Elective course</i>
Teaching methods	<i>150 minutes lectures and 180 minutes structured activities per week.</i>
Workload (incl. contact hours, self-study hours)	<i>Total workload is 136 hours per semester which consists of 150 minutes lectures, 180 minutes structured activities, and 180 minutes self-study per week for 16 weeks.</i>
Credit points	3
Required and recommended prerequisites for joining the module	<i>MAT6307 - Algorithm and Programming</i>
Module objectives/intended learning outcomes	<p><i>CO1. Demonstrate collaborative attitude and independence in carrying out individual tasks and group assignments.</i></p> <p><i>CO2. Communicate ideas in solving mathematical problems in writing or verbally.</i></p> <p><i>CO3. Understand the regression concept in the analysis of the relationship of two variables such as simple linear regression and multiple linear regression</i></p> <p><i>CO4. Students are able to do a descriptive analysis and basic inferential analysis using R Program, a free-license statistical software.</i></p>
Content	<i>This statistical computing subject contains an exploration of the use of the R program statistical software for statistical data analysis, both exploration analysis and confirmation analysis. Several analyzes which are discussed such as inference for two populations, ANOVA, regression, goodness of fit.</i>
Examination forms	<i>CO1: Attitude assessment is carried out at each meeting by observation and / or self-assessment techniques using the assumption that basically every student has a good attitude.</i>

Study and examination requirements	<p><i>The student is given a value of very good or not good attitude if they show it significantly compared to other students in general. The result of attitude assessment is not a component of the final grades, but as one of the requirements to pass the course. Students will pass from this course if at least have a good attitude.</i></p> <p><i>The final mark will be weight as follow:</i></p> <table><tr><th>No</th><th>CO</th><th>Assessment Object</th><th>Assessment Technique</th><th>Weight</th></tr><tr><td rowspan="5">1</td><td rowspan="5">CO2, CO3,C O4</td><td>a. Individual Assignment</td><td rowspan="5">Written</td><td>15%</td></tr><tr><td>b. Group Assignment</td><td>10%</td></tr><tr><td>c. Quiz</td><td>20%</td></tr><tr><td>d. Mid-Term Examination</td><td>25%</td></tr><tr><td>e. Final Examination</td><td>30%</td></tr><tr><td colspan="4">Total</td><td>100%</td></tr></table>	No	CO	Assessment Object	Assessment Technique	Weight	1	CO2, CO3,C O4	a. Individual Assignment	Written	15%	b. Group Assignment	10%	c. Quiz	20%	d. Mid-Term Examination	25%	e. Final Examination	30%	Total				100%
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Reading list	<p>1. M. J. Crawley, 2005, <i>Statistics: An Introduction using R</i>, Imperial College London, UK. John Wiley &amp; Sons, Ltd.</p> <p>2. W. N. Venables, D. M. Smith, and the R Development Core Team, 2015, <i>An Introduction to R</i>, Notes on R: A Programming Environment for Data Analysis and Graphics.</p> <p>3. W. John Braun and Duncan J. Murdoch, 2007, <i>A First Course in Statistical Programming with R</i>, Cambridge University Press.</p> <p>4. Verzani, John. 2005. <i>Using R for Introductory Statistics</i>. hapman&amp; Hall/CRC Press</p>																							