

MODULE DESCRIPTION

Module designation	Statistics
Semester(s) in which the module is taught	2 th /Second Year
Person responsible for the module	Prof. Dr. Achmad Lutfi, M.Pd.
Language	Bahasa Indonesia (Regular Class) English (Internasional Class)
Relation to curriculum	Compulsory Course
Teaching methods	Case Method
Workload:	2 x 50 minutes lectures, 2 x 60 minutes structured activity, 2 x 60 minutes individual activity, 14 weeks per semester, 79 total hours per semester ~ 3.18 ECTS
Credit points:	2 CU = 2 x 1.59 = 3.18 ECTS
Requirements according to the examination regulations	Students attend at least 75% of lectures.
Recommended prerequisites	-
Module objectives/ Intended Learning Outcomes	<p>Students are able to:</p> <ol style="list-style-type: none"> 1. Understanding the nature of statistics for chemistry education students 2. Research data, use descriptive statistics and inferential statistics (parametric and non parametric) 3. Various parametric statistical test techniques available in the SPSS application 4. Various non-parametric statistical test techniques available in the SPSS application 5. Cases of errors in the selection in previous students' theses or articles published in scientific journals.
Content:	<ol style="list-style-type: none"> 1. Statistics is tool of science 2. Basic understanding and concepts of statistics and statistics. 3. Understanding data scale type. 4. Data organizing exercises. 5. Understanding descriptive and inferential data analysis. 6. Parametric statistics using software SPSS. 7. Non parametric statistics using software SPSS. 8. Comparison test. 9. Correlation test. 10. Case study from thesis or article. 11. Suggestions for improvements to errors in the use of statistical tests.
Study and examination requirements and forms of examination	Students are considered to be competent and pass if at least get 68.

	<p>Assessment Recap (Case Method):</p> <table border="1" data-bbox="657 259 1329 416"> <thead> <tr> <th>Assessment Type</th> <th>Weight (%)</th> </tr> </thead> <tbody> <tr> <td>Participatory Activities</td> <td>60%</td> </tr> <tr> <td>Test</td> <td>40%</td> </tr> <tr> <td>TOTAL</td> <td>100%</td> </tr> </tbody> </table> <p>Grading Index: A = 85–100 A- = 80–84 B+ = 75–79 B = 70–74 B- = 65–69 C+ = 60–64 C = 55–59 D = 40–54 E = 0–39</p>	Assessment Type	Weight (%)	Participatory Activities	60%	Test	40%	TOTAL	100%
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Reading list	<ol style="list-style-type: none"> 1. Howell, D. C., 2010. Statistical Methods For Psychology,US: Wadsworth Learning 2. Sudjana. 1996. Metoda Statistika, Bandung : Tarsito 3. Sugiyono, 2009. Statistika untuk Penelitian,Bandung: Alfabeta 4. Sugiyono. 2010.Statistik Nonparametris untuk Penelitian, Bandung. Alfabeta 5. RPS Statistika Dasar 6. Kuzon, W.M., Urbancheck, M.G., & McCabe, S. 1996. The Seven Deadly Sins of Statistical Analysis. Annals of Plastic Surgery. Volume 37/Number 3/Sept 1996, 7. Suriasumantri, J.S. 2013. Filsafat Ilmu; Sebuah Pengantar Populer, Jakarta: Pustaka Sinar Harapan, 2013. 								