

## Module Handbook

<b>Module Name</b>	Statistic for Chemistry					
<b>Module Level</b>	Higher Diploma					
<b>Code, if applicable</b>	VKT219					
<b>Subtitle, if applicable</b>	-					
<b>Courses, if applicable</b>	-					
<b>Semester(s) in which the module is taught</b>	2 <sup>nd</sup> semester					
<b>Person responsible for the module</b>	Kuntari, S.Si., M.Sc. Puji Kurniawati, S.Pd.Si., M.Sc.					
<b>Lecturer</b>	Kuntari, S.Si., M.Sc. Puji Kurniawati, S.Pd.Si., M.Sc.					
<b>Language</b>	Bahasa Indonesia					
<b>Relation to curriculum</b>	Compulsory					
<b>Type of teaching, contact hours</b>	Lectures: 100 min/week Structured Assignments/structured activities: 120 min/week Online Activity/individual study: 120 min/week  Laboratory work: 340 min/week					
<b>Workload</b>	Total Workload	91 hours; 2 CU				
		Face to face teaching	Structured activities	Independent study	Computer Assisted Data Analysis	Exam
	Hours	12	14	14	40	11
<b>Credit Points</b>	2 SCU/3,4 ECTS					
<b>Requirements according to the examination regulations</b>	75% minimum requirements of attendance					
<b>Recommended prerequisites</b>						
<b>Module objectives/intended learning outcomes</b>	<p>PLO 4: Able to lead in his/her working environment and be an exemplification for society</p> <p>PLO 9 : Able to carry out the validation or verification of chemical analysis methods</p> <p>Subject LO: Students are able to explain and apply sampling techniques in chemical analysis</p> <p>Students are able to explain and calculate descriptive statistics including mean, median, mode, variant, and standard deviation</p> <p>Students are able to arrange the data with various methods/forms</p> <p>Student are able to analyze and conclude the results of normality, correlation, and regression test</p>					
<b>Content</b>	<ol style="list-style-type: none"> <li>1. Descriptive statistics</li> <li>2. Estimated parameters</li> <li>3. Homogeneity test</li> <li>4. Hypothesis testing</li> </ol>					

	<p>5. Analysis of variance</p> <p>6. Regression and correlation analysis</p>
<b>Study and examination requirements and forms of examination</b>	Assignment (5%), exam (35%), report (30%), analysis data skill (30%)
<b>Media employed</b>	Google classroom, youtube, zoom meeting, google form, google sheet
<b>Reading list</b>	<ol style="list-style-type: none"> <li>1. Mendenhall, W., Sincich, T., 1995, <i>Statistics for Engineering and the Science</i>, 4<sup>th</sup> Prentice-Hall International, Inc. New Jersey</li> <li>2. Miller, J.C., Miller, J.N., 1984, <i>Statistics for Analytical Chemistry</i>, Ellis Horwood New York</li> <li>3. Miller, J.C., Miller JN, 1991, <i>Statistics for Chemistry</i>, translated by Suroso, Bandung : ITB Publisher</li> </ol>