

## Module Handbook

<b>Module Name</b>	Sampling Technique Lab Work					
<b>Module Level</b>	Higher Diploma					
<b>Code, if applicable</b>	VKD327					
<b>The subtitle, if applicable</b>	-					
<b>Courses, if applicable</b>	-					
<b>Semester(s) in which the module is taught</b>	3 <sup>rd</sup> semester					
<b>A person responsible for the module</b>	Kuntari, S.Si., M.Sc. Tri Esti Purbaningtias, S.Si., M.Si.					
<b>Lecturer</b>	Kuntari, S.Si., M.Sc. Tri Esti Purbaningtias, S.Si., M.Si.					
<b>Language</b>	Bahasa Indonesia					
<b>Relation to curriculum</b>	Compulsory					
<b>Type of teaching, contact hours</b>	Laboratory Practice (teaching, preparation, lab work and report) and Exams: 5.7 hours x 16 week					
<b>Workload</b>	Total Workload	91 hours; 2 CU				
		Face to face teaching	Study literature	Laboratory work	Report	Exam (Theory and Practice)
	Hours	11	11	50	11	8
<b>Credit Points</b>	2 CU/3.4 ECTS					
<b>Requirements according to the examination regulations</b>	100% of requirements attendance in laboratory activities					
<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 7: Able to choose and perform the suitable methods of chemical analysis and operate the chemicals instrument by applying the principles of chemistry occupational safety and health</p> <p>Subject LO:</p> <p>Students are able to select and design environmental sampling</p> <p>Students are able to apply preparation and sampling</p> <p>Students are able to apply sampling handling</p> <p>Students are able to select and apply field parameter testing</p> <p>Students are able to analyze data and report test results in writing and orally</p> <p>Students are able to apply principles and build a culture of chemical safety and health</p> <p>Students are able to build team work in carrying out laboratory procedures</p>					

<b>Content</b>	<ol style="list-style-type: none"> <li>1. Environmental sampling design</li> <li>2. Preparation of water, soil, and air sampling equipment</li> <li>3. Sampling of water, soil, and air</li> <li>4. Handling of water, soil, and air samples</li> <li>5. Field parameter measurement</li> </ol>
<b>Study and examination requirements and forms of examination</b>	Assessment lab work (55%), team work (10%), report (25%) and safety lab (10%)
<b>Media employed</b>	Google classroom, youtube, zoom meeting, google form, google doc, standard method, laboratory handbook
<b>Reading list</b>	<ol style="list-style-type: none"> <li>1. National Standardization Agency, 2008, SNI 6989.57:2008: Water and wastewater-section 57: Surface water sampling method, Jakarta, National Standardization Agency.</li> <li>2. National Standardization Agency, 2008, SNI 6989.58:2008: Groundwater sampling method-section 58: Surface water sampling method, Jakarta, National Standardization Agency.</li> <li>3. National Standardization Agency, 2008, SNI 19-7119.9:2005: Ambient air-Part 9: Determination of sampling locations for roadside air quality monitoring tests, Jakarta, National Standardization Agency.</li> <li>4. National Standardization Agency, 2008, SNI 19-7119.6:2005: Ambient air-Part 6: Determination of sampling locations for ambient air quality monitoring tests, Jakarta, National Standardization Agency.</li> <li>5. National Standardization Agency, 2008, SNI 7230:2009: Techniques for determining the point of air sampling in workplace, Jakarta, National Standardization Agency.</li> <li>6. Hadi, A., 2007, Principles of Environmental Sampling Management, PT. Gramedia Pustaka Utama</li> </ol>