



**Universitas Negeri Surabaya  
Faculty of Postgraduate School,  
Vocational Education Doctoral Study Program**

Document  
Code

**SEMESTER LEARNING PLAN**

<b>Courses</b>	<b>CODE</b>	<b>Course Family</b>	<b>Credit Weight</b>			<b>SEMESTER</b>	<b>Compilation Date</b>																																																												
Advanced Quantitative Research Methods	8300102003	Compulsory Study Program Subjects	T=2	P=0	ECTS=5.04	1	May 3, 2023																																																												
<b>AUTHORIZATION</b>		<b>SP Developer</b>	<b>Course Cluster Coordinator</b>			<b>Study Program Coordinator</b>																																																													
		Prof. Ekohariadi, Prof. Suparji, Dr. Lilik Anifah	Suparji			Dr. Ratna Suhartini, M.Si.																																																													
<b>Learning model</b>	Project Based Learning																																																																		
<b>Program Learning Outcomes (PLO)</b>	PLO study program which is charged to the course																																																																		
	Program Objectives (PO)																																																																		
	PO - 1	Able to analyze scientific articles in terms of rationale, theoretical basis, results and discussion, as well as conclusions and recommendations/suggestions. (PLO6)																																																																	
	PLO-PO Matrix																																																																		
		<table border="1" style="margin-left: auto; margin-right: auto;"> <tr> <td style="text-align: center;">P.O</td> <td colspan="6"></td> </tr> <tr> <td style="text-align: center;">PO-1</td> <td colspan="6"></td> </tr> </table>						P.O							PO-1																																																				
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PO-1																																																																			
PO Matrix at the end of each learning stage (Sub-PO)																																																																			
	<table border="1" style="margin-left: auto; margin-right: auto;"> <tr> <td rowspan="2" style="text-align: center;">P.O</td> <td colspan="16" style="text-align: center;">Week</td> </tr> <tr> <td style="text-align: center;">1</td> <td style="text-align: center;">2</td> <td style="text-align: center;">3</td> <td style="text-align: center;">4</td> <td style="text-align: center;">5</td> <td style="text-align: center;">6</td> <td style="text-align: center;">7</td> <td style="text-align: center;">8</td> <td style="text-align: center;">9</td> <td style="text-align: center;">10</td> <td style="text-align: center;">11</td> <td style="text-align: center;">12</td> <td style="text-align: center;">13</td> <td style="text-align: center;">14</td> <td style="text-align: center;">15</td> <td style="text-align: center;">16</td> </tr> <tr> <td style="text-align: center;">PO-1</td> <td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td> </tr> </table>																P.O	Week																1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	PO-1																	
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PO-1																																																																			
<b>Short Course Description</b>	This course discusses the theory and practice of quantitative research, scientific research steps starting from problem identification/formulation, theoretical and empirical studies, determining variables, design and methods, data collection techniques, analysis and drawing conclusions.																																																																		
<b>References</b>	<b>Main :</b>																																																																		
	<ol style="list-style-type: none"> <li>1. 1) Franekel, Jack R. 2009. How to Design and Evaluate Research in Education. New York: McGraw-Hill.</li> <li>2. 2) Kerlinger, Fred. N. 2004. Foundation of Behavioral Research. New York: Holt, Rinehart and Winston, Inc.</li> <li>3. 3) Tuckman B. 1988. Conducting Education Research. New York: Hartcourt Brace Javanovich Publisher.</li> <li>4. 4) Krathwohl, David R. 2006. Methodes of Educational and Social Science Research. New York: Addison Wesley Longman, Inc.</li> </ol>																																																																		
	<b>Supporters:</b>																																																																		
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<b>Supporting lecturer</b>	Prof. Dr. Ekohariadi, M.Pd. Dr. Djoko Suwito, M.Pd. Prof. Dr. Suparji, S.Pd., M.Pd.																																																																		
<b>Week</b>	Final abilities of each learning stage (Sub-PO)	<b>Evaluation</b>		<b>Help Learning, Learning methods, Student Assignments, [ Estimated time ]</b>		<b>Learning materials [ References ]</b>	<b>Assessment Weight (%)</b>																																																												
		<b>Indicator</b>	<b>Criteria &amp; Form</b>	<b>Offline ( offline )</b>	<b>Online ( online )</b>																																																														
<b>(1)</b>	<b>(2)</b>	<b>(3)</b>	<b>(4)</b>	<b>(5)</b>	<b>(6)</b>	<b>(7)</b>	<b>(8)</b>																																																												

1	Able to be honest, objective, thorough and responsible in research in the field of vocational education. (CLO4-PLO 10)	Able to explain the introduction to Advanced Quantitative Research Methods	<b>Criteria:</b> Assessment score 0-100  <b>Form of Assessment :</b> Participatory Activities	Direct instruction, 2x50 minute discussion		<b>Material:</b> Advanced Quantitative Research Methods <b>References: 1)</b> <i>Franekel, Jack R. 2009. How to Design and Evaluate Research in Education. New York: McGraw-Hill.</i>	2%
2	Able to be honest, objective, thorough and responsible in research in the field of vocational education. (CLO4-PLO 10)	Able to explain Quantitative Research Methods	<b>Criteria:</b> Assessment score 0-100	Direct instruction, 2x50 minute discussion		<b>Material:</b> 2. Quantitative Research Methods <b>Literature: 2)</b> <i>Kerlinger, Fred. N. 2004. Foundations of Behavioral Research. New York: Holt, Rinehart and Winston, Inc.</i>	2%
3	Able to analyze problems in the field of vocational education rationally, based on theoretical, empirical foundations, and based on the state of the art that has been reviewed. (CLO2-PLO6)	Students are able to explain Design-Based Research (DBR) in educational	<b>Criteria:</b> Assessment score 0-100  <b>Form of Assessment :</b> Participatory Activities	Lectures, Discussions, Presentations 2x50 minutes		<b>Material:</b> Design-Based Research (DBR) in educational <b>References: 3)</b> <i>Tuckman B. 1988. Conducting Education Research. New York: Hartcourt Brace Javanovich Publishers.</i>  <b>Material:</b> Design-Based Research (DBR) in educational <b>References: 4)</b> <i>Krathwohl, David R. 2006. Methods of Educational and Social Science Research. New York: Addison Wesley Longman, Inc.</i>	2%
4	Able to analyze problems in the field of vocational education rationally, based on theoretical, empirical foundations, and based on the state of the art that has been reviewed. (CLO2-PLO6)	Students are able to explain Design-Based Research (DBR) in educational	<b>Criteria:</b> Assessment score 0-100  <b>Form of Assessment :</b> Participatory Activities	Lectures, Discussions, Presentations 2x50 minutes		<b>Material:</b> Design-Based Research (DBR) in educational <b>References: 3)</b> <i>Tuckman B. 1988. Conducting Education Research. New York: Hartcourt Brace Javanovich Publishers.</i>  <b>Material:</b> Design-Based Research (DBR) in educational <b>References: 4)</b> <i>Krathwohl, David R. 2006. Methods of Educational and Social Science Research. New York: Addison Wesley Longman, Inc.</i>	2%
5	Able to build a framework of insight and understanding that supports a dissertation research plan (compiling a state of the art) through an inter, multi and transdisciplinary approach. (CLO3-PLO8)	Students are able to compile a State of the Art Research (Exploration/Literature Review Stage)	<b>Criteria:</b> Assessment score 0-100  <b>Form of Assessment :</b> Project Results Assessment / Product Assessment	Lecture, Discussion, Presentation, PjBl 2x50 minutes		<b>Material:</b> Stages of Exploration/Literature Review <b>Literature:</b> <i>Krathwohl, David R. 2006. Methods of Educational and Social Science Research. New York: Addison Wesley Longman, Inc.</i>  <b>Material:</b> Exploration Stages/Literature Review <b>Literature:</b> <i>Relevant Research Journals</i>	10%

6	Able to build a framework of insight and understanding that supports a dissertation research plan (compiling a state of the art) through an inter, multi and transdisciplinary approach. (CLO3-PLO8)	Students are able to compile a State of the Art Research (Exploration/Literature Review Stage)	<b>Criteria:</b> Assessment score 0-100  <b>Form of Assessment :</b> Project Results Assessment / Product Assessment	Lecture, Discussion, Presentation, PjBl 2x50 minutes		<b>Material:</b> Stages of Exploration/Literature Review <b>Literature:</b> <i>Krathwohl, David R. 2006. Methods of Educational and Social Science Research. New York: Addison Wesley Longman, Inc.</i>  <b>Material:</b> Exploration Stages/Literature Review <b>Literature:</b> <i>Relevant Research Journals</i>	10%
7	Able to build a framework of insight and understanding that supports a dissertation research plan (compiling a state of the art) through an inter, multi and transdisciplinary approach. (CLO3-PLO8)	Students are able to compile a State of the Art Research (Exploration/Literature Review Stage)	<b>Criteria:</b> Assessment score 0-100  <b>Form of Assessment :</b> Project Results Assessment / Product Assessment	Lecture, Discussion, Presentation, PjBl 2x50 minutes		<b>Material:</b> Stages of Exploration/Literature Review <b>Literature:</b> <i>Krathwohl, David R. 2006. Methods of Educational and Social Science Research. New York: Addison Wesley Longman, Inc.</i>  <b>Material:</b> Exploration Stages/Literature Review <b>Literature:</b> <i>Relevant Research Journals</i>	10%
8	Design ideas/schemes/research flow diagrams to solve vocational education problems (CLO1-PLO5)	Students are able to design ideas/schemes/research flow diagrams to solve vocational education problems	<b>Criteria:</b> Assessment score 0-100  <b>Form of Assessment :</b> Project Results Assessment / Product Assessment	PjBl, Discussion, Presentation		<b>Material:</b> Research Design <b>References:</b> 1) <i>Franekel, Jack R. 2009. How to Design and Evaluate Research in Education. New York: McGraw-Hill.</i>  <b>Material:</b> Research Design <b>Library:</b> <i>Relevant research journals</i>	5%
9	Design ideas/schemes/research flow diagrams to solve vocational education problems (CLO1-PLO5)	Students are able to design ideas/schemes/research flow diagrams to solve vocational education problems	<b>Criteria:</b> Assessment score 0-100  <b>Form of Assessment :</b> Project Results Assessment / Product Assessment	PjBl, Discussion, Presentation		<b>Material:</b> Research Design <b>References:</b> 1) <i>Franekel, Jack R. 2009. How to Design and Evaluate Research in Education. New York: McGraw-Hill.</i>  <b>Material:</b> Research Design <b>Library:</b> <i>Relevant research journals</i>	5%
10	Design ideas/schemes/research flow diagrams to solve vocational education problems (CLO1-PLO5)	Students are able to explain Research Design according to their research	<b>Criteria:</b> Assessment score 0-100  <b>Form of Assessment :</b> Participatory Activities	Lectures, Discussions, Presentations 2x50 minutes		<b>Material:</b> Research Design <b>References:</b> 1) <i>Franekel, Jack R. 2009. How to Design and Evaluate Research in Education. New York: McGraw-Hill.</i>  <b>Material:</b> Research Design <b>Library:</b> <i>Relevant research journals</i>	2%
11	Design ideas/schemes/research flow diagrams to solve vocational education problems (CLO1-PLO5)	Students are able to explain about Mixed Method	<b>Criteria:</b> Assessment score 0-100  <b>Form of Assessment :</b> Participatory Activities	Lectures, Discussions, Presentations 2x50 minutes		<b>Material:</b> Mixed Method <b>References:</b> 1) <i>Franekel, Jack R. 2009. How to Design and Evaluate Research in Education. New York: McGraw-Hill.</i>	2%
12	Design ideas/schemes/research flow diagrams to solve vocational education problems (CLO1-PLO5)	Students are able to explain about Mixed Method	<b>Criteria:</b> Assessment score 0-100  <b>Form of Assessment :</b> Participatory Activities	Lectures, Discussions, Presentations 2x50 minutes		<b>Material:</b> Mixed Method <b>References:</b> 1) <i>Franekel, Jack R. 2009. How to Design and Evaluate Research in Education. New York: McGraw-Hill.</i>	2%

13	Able to prepare research drafts in the field of vocational education. (CLO2-PLO6)	Students are able to design instruments in the field of Vocational Education	<b>Form of Assessment :</b> Project Results Assessment / Product Assessment	PjBl, Discussion, Presentation 2x50 minutes		<b>Material:</b> Instrument Design <b>References:</b> 1) <i>Franekel, Jack R. 2009. How to Design and Evaluate Research in Education. New York: McGraw-Hill.</i>  <b>Material:</b> Instrument Design <b>Literature:</b> <i>Relevant Research Journals</i>	10%
14	Able to prepare research drafts in the field of vocational education. (CLO2-PLO6)	Students are able to design instruments in the field of Vocational Education	<b>Form of Assessment :</b> Project Results Assessment / Product Assessment	PjBl, Discussion, Presentation 2x50 minutes		<b>Material:</b> Instrument Design <b>References:</b> 1) <i>Franekel, Jack R. 2009. How to Design and Evaluate Research in Education. New York: McGraw-Hill.</i>  <b>Material:</b> Instrument Design <b>Literature:</b> <i>Relevant Research Journals</i>	10%
15	Able to prepare research drafts in the field of vocational education. (CLO2-PLO6)	Students are able to create research drafts in the field of Vocational Education	<b>Criteria:</b> Assessment score 0-100  <b>Form of Assessment :</b> Project Results Assessment / Product Assessment	PjBl, Discussion, Presentation 2x50 minutes		<b>Material:</b> Research Proposal <b>References:</b> 1) <i>Franekel, Jack R. 2009. How to Design and Evaluate Research in Education. New York: McGraw-Hill.</i>  <b>Material:</b> Research Proposal <b>Library:</b> <i>Relevant research journals</i>	10%
16	Able to prepare research drafts in the field of vocational education. (CLO2-PLO6)	Students are able to create research drafts in the field of Vocational Education	<b>Criteria:</b> Assessment score 0-100  <b>Form of Assessment :</b> Project Results Assessment / Product Assessment	PjBl, Discussion, Presentation 2x50 minutes		<b>Material:</b> Research Proposal <b>References:</b> 1) <i>Franekel, Jack R. 2009. How to Design and Evaluate Research in Education. New York: McGraw-Hill.</i>  <b>Material:</b> Research Proposal <b>Library:</b> <i>Relevant research journals</i>	18%

#### Evaluation Percentage Recap: Project Based Learning

No	Evaluation	Percentage
1.	Participatory Activities	12%
2.	Project Results Assessment / Product Assessment	88%
		100%

#### Notes

- Learning Outcomes of Study Program Graduates (PLO - Study Program)** are the abilities possessed by each Study Program graduate which are the internalization of attitudes, mastery of knowledge and skills according to the level of their study program obtained through the learning process.
- The PLO imposed on courses** are several learning outcomes of study program graduates (CPL-Study Program) which are used for the formation/development of a course consisting of aspects of attitude, general skills, special skills and knowledge.
- Program Objectives (PO)** are abilities that are specifically described from the PLO assigned to a course, and are specific to the study material or learning materials for that course.
- Subject Sub-PO (Sub-PO)** is a capability that is specifically described from the PO that can be measured or observed and is the final ability that is planned at each learning stage, and is specific to the learning material of the course.
- Indicators for assessing** abilities in the process and student learning outcomes are specific and measurable statements that identify the abilities or performance of student learning outcomes accompanied by evidence.
- Assessment Criteria** are benchmarks used as a measure or measure of learning achievement in assessments based on predetermined indicators. Assessment criteria are guidelines for assessors so that assessments are consistent and unbiased. Criteria can be quantitative or qualitative.
- Forms of assessment:** test and non-test.
- Forms of learning:** Lecture, Response, Tutorial, Seminar or equivalent, Practicum, Studio Practice, Workshop Practice, Field Practice, Research, Community Service and/or other equivalent forms of learning.
- Learning Methods:** Small Group Discussion, Role-Play & Simulation, Discovery Learning, Self-Directed Learning, Cooperative Learning, Collaborative Learning, Contextual Learning, Project Based Learning, and other equivalent methods.
- Learning materials** are details or descriptions of study materials which can be presented in the form of several main points and sub-topics.
- The assessment weight** is the percentage of assessment of each sub-PO achievement whose size is proportional to the level of difficulty of achieving that sub-PO, and the total is 100%.

12. TM=Face to face, PT=Structured assignments, BM=Independent study.