



**Universitas Negeri Surabaya
Faculty of Languages and Arts
Bachelor of Music Study Program**

Document Code

SEMESTER LEARNING PLAN

Courses	CODE	Course Family	Credit Weight			SEMESTER	Compilation Date
Organological Acoustics	9122102001	Compulsory Study Program Subjects	T=2	P=0	ECTS=3.18	2	June 2, 2023
AUTHORIZATION	SP Developer		Course Cluster Coordinator			Study Program Coordinator	
	Joko Winarko, S.Sn.M.Sn.				Agus Suwahyono, S.Sn., M.Pd.	

Learning model	Case Studies
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Program Learning Outcomes (PLO)	PLO study program that is charged to the course															
	PLO-7	Able to adapt to developments in technology, the business world and the music industry (DUDI).														
	PLO-12	Able to design, create, collaborate and express various kinds of ideas or creative ideas by creating musical works utilizing new ideas and traditional idioms.														
	Program Objectives (PO)															
	PO - 1	Demonstrate a responsible attitude towards work in their field of expertise independently														
	PO - 2	Able to study the implications of developing or implementing technological knowledge that pays attention to and applies humanities values according to their expertise based on scientific rules, procedures and ethics in order to produce solutions, ideas, designs or art criticism														
	PO - 3	understanding of the classification of musical instruments in terms of sound sources and voicing techniques														
	PO - 4	knowledge in the context of research on musical instruments and presentation techniques														
	PLO-PO Matrix															
	<table border="1" style="margin: auto; border-collapse: collapse;"> <thead> <tr> <th style="width: 15%;">P.O</th> <th style="width: 15%;">PLO-7</th> <th style="width: 15%;">PLO-12</th> </tr> </thead> <tbody> <tr> <td>PO-1</td> <td></td> <td style="text-align: center;">✓</td> </tr> <tr> <td>PO-2</td> <td style="text-align: center;">✓</td> <td></td> </tr> <tr> <td>PO-3</td> <td style="text-align: center;">✓</td> <td></td> </tr> <tr> <td>PO-4</td> <td></td> <td style="text-align: center;">✓</td> </tr> </tbody> </table>		P.O	PLO-7	PLO-12	PO-1		✓	PO-2	✓		PO-3	✓		PO-4	
P.O	PLO-7	PLO-12														
PO-1		✓														
PO-2	✓															
PO-3	✓															
PO-4		✓														

PO Matrix at the end of each learning stage (Sub-PO)																																																																																																						
	<table border="1" style="margin: auto; border-collapse: collapse;"> <thead> <tr> <th rowspan="2" style="width: 10%;">P.O</th> <th colspan="16">Week</th> </tr> <tr> <th>1</th><th>2</th><th>3</th><th>4</th><th>5</th><th>6</th><th>7</th><th>8</th><th>9</th><th>10</th><th>11</th><th>12</th><th>13</th><th>14</th><th>15</th><th>16</th> </tr> </thead> <tbody> <tr> <td>PO-1</td> <td style="text-align: center;">✓</td><td style="text-align: center;">✓</td><td></td><td></td><td></td><td></td><td></td><td></td><td style="text-align: center;">✓</td><td></td><td></td><td></td><td></td><td></td><td></td><td></td> </tr> <tr> <td>PO-2</td> <td></td><td></td><td></td><td></td><td></td><td style="text-align: center;">✓</td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td> </tr> <tr> <td>PO-3</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 style="text-align: center;">✓</td><td style="text-align: center;">✓</td><td style="text-align: center;">✓</td><td style="text-align: center;">✓</td> </tr> <tr> <td>PO-4</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> </tbody> </table>	P.O	Week																1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	PO-1	✓	✓							✓								PO-2						✓											PO-3													✓	✓	✓	✓	PO-4																
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PO-4																																																																																																						

Short Course Description	Knowledge of Acoustic and Organology theory in the field of Musical Arts.
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References	Main :
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1. Kustap Muttaqim, Moh. 2008. Pengantar Musikologi Untuk SMK, MUSIK KLASIK. Direktorat Pembinaan SMK, Direktorat Jendral Manajemen Pendidikan Dasar dan Menengah, Departemen Pendidikan Nasional.
2. Nofrijon, Drs. 1995. TATA SUARA DAN AKUSTIKA, Buku Pegangan Mata Kuliah Tata Suara Dan Akustika. Sekolah Tinggi Seni Indonesia Surakarta.
3. Prier, Edmund. Karl. SJ. 2008. Sejarah Musik I. Yogyakarta: Pusat Musik Liturgi.
4. Ruslani B. A, 1992. SUARA Hi-Fi, Pelengkap Cross Over. Bandung, Carya Remaja.
5. Suwardi A.L, 2007. Rekayasa Instrumen Dalam Penciptaan Musik Inovatif 1D, Makalah dalam Seminar PENGEMBANGAN ILMU BUDAYA, SIMPOSIUM PENCIPTAAN SENI. Sekolah Tinggi Seni Indonesia Surakarta.

Supporters:

Supporting lecturer

Joko Winarko, S.Sn., M.Sn.
Dhani Kristiandri, S.Pd., M.Sn.
Marda Putra Mahendra, S.Pd., M.Pd.

Week-	Final abilities of each learning stage (Sub-PO)	Evaluation		Help Learning, Learning methods, Student Assignments, [Estimated time]		Learning materials [References]	Assessment Weight (%)
		Indicator	Criteria & Form	Offline (offline)	Online (online)		
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
1	1.Acoustic Organology lecture contract 2.Know the meaning of Acoustics and Organology	Explanation of Contract and Targets for Acoustic Organology Lectures	Criteria: Able to understand the explanation of the Contract and Targets for Acoustic Organology Lectures Form of Assessment : Participatory Activities	Lectures and References 100	Lecture, PPT 100	Material: Knowing the meaning of Acoustics and Organology Literature: <i>Kustap Muttaqim, Moh. 2008. Introduction to Musicology for Vocational Schools, CLASSIC MUSIC. Directorate of Vocational School Development, Directorate General of Primary and Secondary Education Management, Department of National Education.</i>	5%
2	1.Know the meaning of Acoustics and Organology 2.Understand the history of the development of Acoustic Organology in the field of musical arts	1.Explain the meaning of Acoustic Organology 2.Concluding the development of Acoustic Organology in the art of music	Criteria: 1.Able to explain the meaning of Acoustic Organology 2.Able to conclude the development of Acoustic Organology in the art of music Form of Assessment : Participatory Activities	Lectures, References 100	Lecture, PPT 100	Material: Explaining the meaning of Acoustic Organology Library: <i>Kustap Muttaqim, Moh. 2008. Introduction to Musicology for Vocational Schools, CLASSIC MUSIC. Directorate of Vocational School Development, Directorate General of Primary and Secondary Education Management, Department of National Education.</i> Material: Understanding the history of the development of Acoustic Organology in the field of music. Reference: <i>Nofirjon, Drs. 1995. SOUND AND ACOUSTICS, Handbook for Sound and Acoustics. Surakarta Indonesian College of Arts.</i>	5%

3	Know the classification of musical instruments in terms of presentation techniques and materials	1.Explain the classification of musical instruments in terms of technique and materials 2.Conclude the explanation of musical instruments in terms of techniques and materials	Criteria: Able to explain the classification of musical instruments in terms of techniques and materials Form of Assessment : Practice / Performance	Lectures, References 100	Lectures, References	Material: Understand the classification of musical instruments in terms of presentation techniques and materials References: <i>Nofrijon, Drs. 1995. SOUND AND ACOUSTICS, Handbook for Sound and Acoustics. Surakarta Indonesian College of Arts.</i>	5%
4	Knowing the meaning of musical instruments in terms of techniques and materials, the focus of Idiofone	Explains the meaning of musical instruments in terms of technique and Idiofone focus materials	Criteria: Able to explain the meaning of musical instruments in terms of Idiofone techniques and focus materials Forms of Assessment : Participatory Activities, Project Results Assessment / Product Assessment, Portfolio Assessment, Practical Assessment, Practical / Performance, Test	Lectures, Discussions 100	Lectures, PPTs, Discussions 100	Material: Understand the meaning of musical instruments in terms of techniques and materials, focus on Idiofone Reader: <i>Prier, Edmund. Karl. S.J. 2008. History of Music I. Yogyakarta: Center for Liturgical Music.</i>	5%
5	Know the meaning of classification of musical instruments in terms of Aerofone	Explain the meaning of classification of musical instruments in terms of Aerofone	Criteria: Able to explain the meaning of classification of musical instruments in terms of Aerofone Form of Assessment : Participatory Activities, Practice/Performance	Lectures, Discussions 100	Lectures, discussions	Material: Understand the meaning of classification of musical instruments in terms of Aerofone Library: <i>Prier, Edmund. Karl. S.J. 2008. History of Music I. Yogyakarta: Center for Liturgical Music.</i>	5%
6	Knowing the meaning of musical instruments in terms of techniques and materials, the focus of Coordofone	Explains the meaning of musical instruments in terms of techniques and materials, focusing on the chordophone	Criteria: Able to explain the meaning of musical instruments in terms of technique and materials, focus on chordophone Form of Assessment : Participatory Activities	lectures, discussions 100	lectures, discussions 100	Material: Knowing the meaning of musical instruments in terms of techniques and materials, focus on Coordofone Reader: <i>Nofrijon, Drs. 1995. SOUND AND ACOUSTICS, Handbook for Sound and Acoustics. Indonesian Art College Surakarta.</i> Material: Knowing the meaning of musical instruments in terms of techniques and materials, focus on Coordofone Reader: <i>Nofrijon, Drs. 1995. SOUND AND ACOUSTICS, Handbook for Sound and Acoustics. Indonesian Art College Surakarta.</i>	5%

7	Know musical instruments in terms of techniques and materials, focus on membranophones	Explains musical instruments in terms of techniques and materials, focusing on membranophone.	<p>Criteria: 4 Complete and precise explanation</p> <p>Form of Assessment : Participatory Activities, Tests</p>	lectures, discussions 100	lecture, discussion	<p>Material: Understanding musical instruments in terms of techniques and materials, focus on membranophones. Reference: <i>Nofrijon, Drs. 1995. SOUND AND ACOUSTICS, Handbook for Sound and Acoustics. Surakarta Indonesian College of Arts.</i></p>	5%
8	Understanding musical instruments in terms of techniques and materials, focusing on electrophones	Understanding of musical instruments in terms of techniques and materials, focusing on electrophones	<p>Criteria: Ability to understand electrophone musical instruments</p> <p>Forms of Assessment : Participatory Activities, Practical Assessment, Practical / Performance, Tests</p>	Written questions (UTS) 100		<p>Material: Understanding musical instruments in terms of techniques and materials, focus on electrophones. References: <i>Nofrijon, Drs. 1995. SOUND AND ACOUSTICS, Handbook for Sound and Acoustics. Surakarta Indonesian College of Arts.</i></p> <hr/> <p>Material: Understanding musical instruments in terms of techniques and materials, focus on electrophones. References: <i>Prier, Edmund. Karl. S.J. 2008. History of Music I. Yogyakarta: Center for Liturgical Music.</i></p>	10%
9	Know the meaning of acoustic organology, classification of musical instruments in terms of musical materials and techniques	<p>1.Explains the meaning of acoustic organology, classification of musical instruments in terms of musical materials and techniques</p> <p>2.Concluding the understanding of organological acoustics, classification of musical instruments in terms of musical materials and techniques</p>	<p>Criteria:</p> <p>1.Able to explain the meaning of acoustic organology, classification of musical instruments in terms of musical materials and techniques</p> <p>2.Able to summarize the meaning of acoustic organology, classification of musical instruments in terms of musical materials and techniques</p> <p>Form of Assessment : Participatory Activities</p>	lectures, discussions 100	lecture, discussion	<p>Material: Understand the meaning of acoustic organology, classification of musical instruments in terms of musical materials and techniques. References: <i>Prier, Edmund. Karl. S.J. 2008. History of Music I. Yogyakarta: Center for Liturgical Music.</i></p> <hr/> <p>Material: Understand the meaning of acoustic organology, classification of musical instruments in terms of musical materials and techniques. References: <i>Prier, Edmund. Karl. S.J. 2008. History of Music I. Yogyakarta: Center for Liturgical Music.</i></p>	5%

10	<p>1. Know the history of the development of acoustics in the art of music</p> <p>2. Understand the history of the development of acoustics in the art of music</p>	<p>1. Explain the history of the development of acoustics in the art of music</p> <p>2. Concluding the history of the development of acoustics in the art of music</p>	<p>Criteria:</p> <p>1. Able to explain the history of the development of acoustics in the art of music</p> <p>2. Able to summarize the history of the development of acoustics in the art of music</p> <p>Form of Assessment : Participatory Activities</p>	lectures, discussions 100	lecture, discussion	<p>Material: Understand the history of the development of acoustics in the art of music. Reference: <i>Prier, Edmund. Karl. S.J. 2008. History of Music I. Yogyakarta: Center for Liturgical Music.</i></p> <hr/> <p>Material: Understanding the history of acoustic development in the art of music Reference: <i>Ruslani B. A, 1992. Hi-Fi SOUND, Cross Over Complementary. Bandung, Carya Teenagers.</i></p>	5%
11	<p>1. Knowing the resonator space in a musical instrument</p> <p>2. Understand the history of the development of resonator chambers in musical instruments</p>	<p>1. Explain the meaning and development of resonator spaces in musical instruments</p> <p>2. Deducing resonator space in musical instruments</p>	<p>Criteria:</p> <p>1. Able to explain the meaning and development of resonator spaces in musical instruments</p> <p>2. Able to conclude the resonator space in a musical instrument</p> <p>Form of Assessment : Participatory Activities</p>	lectures, discussions 100	lecture, discussion	<p>Material: Explains the meaning and development of resonator space in musical instruments. Reference: <i>Ruslani B. A, 1992. Hi-Fi SOUND, Cross Over Complementary. Bandung, Carya Teenagers.</i></p> <hr/> <p>Material: Be able to summarize the resonator space in musical instruments. Reference: <i>Prier, Edmund. Karl. S.J. 2008. History of Music I. Yogyakarta: Center for Liturgical Music.</i></p>	5%
12	Understanding room acoustics as a sound medium (sound propagation, sound dampening, sound management)	Explain room acoustics as a sound medium (sound propagation, sound dampening, sound management)	<p>Criteria: Concrete explanation of room acoustics as a sound medium</p> <p>Forms of Assessment : Participatory Activities, Project Results Assessment / Product Assessment, Tests</p>	lectures, discussions 100		<p>Material: Explaining room acoustics as a sound medium (sound propagation, sound dampening, sound management) References: <i>Ruslani B. A, 1992. Hi-Fi SOUND, Cross Over Complementary. Bandung, Carya Teenagers.</i></p>	5%

13	Understanding room acoustics as a sound medium (sound propagation, sound dampening, sound management)	Explain room acoustics as a sound medium (sound propagation, sound dampening, sound management)	Criteria: Able to explain room acoustics as a sound medium (sound propagation, sound dampening, sound management) Form of Assessment : Participatory Activities	lectures, discussions 100		Material: Understanding room acoustics as a sound medium (sound propagation, sound dampening, sound management) References: <i>Suardi AL, 2007. Instrument Engineering in Innovative 1D Music Creation, Paper in Seminar on DEVELOPMENT OF CULTURAL SCIENCE, ART CREATION SYMPOSIUM. Indonesian Art College Surakarta.</i>	5%
14	1. Understanding room acoustics as a sound medium (sound propagation, sound dampening, sound management) 2. Understand room acoustics as a sound medium (sound propagation, sound dampening, sound management)	1. Explain room acoustics as a sound medium (sound propagation, sound dampening, sound management) 2. Concluding room acoustics as a sound medium (sound propagation, sound dampening, sound management)	Criteria: 1. Able to explain room acoustics as a sound medium (sound propagation, sound dampening, sound management) 2. Able to summarize room acoustics as a sound medium (sound propagation, sound dampening, sound management) Forms of Assessment : Participatory Activities, Project Results Assessment / Product Assessment, Practices / Performance	lectures, discussions 100		Material: Understanding room acoustics as a sound medium (sound propagation, sound dampening, sound management) References: <i>Suardi AL, 2007. Instrument Engineering in Innovative 1D Music Creation, Paper in Seminar on DEVELOPMENT OF CULTURAL SCIENCE, ART CREATION SYMPOSIUM. Indonesian Art College Surakarta.</i> Material: Understanding room acoustics as a sound medium (sound propagation, sound dampening, sound management) References: <i>Suardi AL, 2007. Instrument Engineering in Innovative 1D Music Creation, Paper in Seminar on DEVELOPMENT OF CULTURAL SCIENCE, ART CREATION SYMPOSIUM. Surakarta Indonesian College of Arts.</i>	5%

15	Knowing the development of room acoustics and musical instruments for presenting music	Explain the development of room acoustics and musical instruments for presenting music	<p>Criteria: Able to understand the development of room acoustics and musical instruments for presenting music</p> <p>Form of Assessment : Participatory Activities</p>	lectures, discussions 100		<p>Material: Able to understand the development of room acoustics and musical instruments for the presentation of music.</p> <p>Reference: Suwardi AL, 2007. <i>Instrument Engineering in Innovative 1D Music Creation, Paper in Seminar on DEVELOPMENT OF CULTURAL SCIENCE, ART CREATION SYMPOSIUM. Indonesian Art College Surakarta.</i></p> <p>Material: Understanding the development of room acoustics and musical instruments for the presentation of music</p> <p>Reference: Suwardi AL, 2007. <i>Instrument Engineering in Innovative 1D Music Creation, Paper in Seminar on DEVELOPMENT OF CULTURAL SCIENCE, ART CREATION SYMPOSIUM. Indonesian Art College Surakarta.</i></p>	5%
16	Understand the development of room acoustics and musical instruments for presenting music	UAS	<p>Criteria: Able to answer questions and conclude developments in room acoustics and musical instruments for presenting music</p> <p>Form of Assessment : Participatory Activities, Tests</p>	Question (UAS) 100		<p>Material: Understanding the development of room acoustics and musical instruments for the presentation of music</p> <p>Reference: Suwardi AL, 2007. <i>Instrument Engineering in Innovative 1D Music Creation, Paper in Seminar on DEVELOPMENT OF CULTURAL SCIENCE, ART CREATION SYMPOSIUM. Indonesian Art College Surakarta.</i></p>	20%

Evaluation Percentage Recap: Case Study

No	Evaluation	Percentage
1.	Participatory Activities	61.67%
2.	Project Results Assessment / Product Assessment	4.17%
3.	Portfolio Assessment	0.83%
4.	Practical Assessment	3.33%
5.	Practice / Performance	12.5%
6.	Test	17.5%
		100%

Notes

1. **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.

2. **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.
3. **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.
4. **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.
5. **Indicators for assessing** ability in the process and student learning outcomes are specific and measurable statements that identify the ability or performance of student learning outcomes accompanied by evidence.
6. **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.
7. **Forms of assessment:** test and non-test.
8. **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.
9. **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.
10. **Learning materials** are details or descriptions of study materials which can be presented in the form of several main points and sub-topics.
11. **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.