 <p>Mencerdaskan dan Memantabatkan Bangsa</p>	<p>MINISTRY OF EDUCATION AND CULTURE STATE UNIVERSITY OF JAKARTA</p> <p>BIOLOGY LABORATORY & BIOLOGY EDUCATION</p> <p>FACULTY OF MATHEMATICS AND SCIENCE</p> <p>Hasjim Asjarie Building Lt 8-9 Jl. Rawamangun Muka Jakarta 13220 Tel/Fax 021-4894909</p>	STANDARD OPERATING PROCEDURE (SOP)	
		EQUIPMENT LOAN	
		No. Document	
		Edition	01
		Revision	00
		Is effective	2022
Page	1 - 8		

1. OBJECTIVE

Provides a mechanism for borrowing category 1, 2 and 3 laboratory equipment for practicum and research activities for lecturers and students in the biology family, FMIPA and external parties.

2. SCOPE

Implementation of this SOP applies in biology laboratories and biology education FMIPA as well as external parties, where the implementation of the SOP involves the head of the laboratory, PLP/laboratory assistant, lecturers and students, as well as related agencies.

3. DEFINITION

Definition of category 1, 2 and 3 equipment according to Permenpan RB No. 03 of 2010, namely:

Category 1 equipment is equipment that is easy to operate and maintain, has low risk of use, has low measurement accuracy/accuracy, and has a simple work system and is sufficient to operate using guidelines according to SOPs and manuals.

Category 2 equipment is equipment with moderate operation and maintenance, moderate risk of use, moderate accuracy/accuracy of measurement, and work system that is not very complicated and its operation requires special/certain training.

Category 3 equipment is equipment that is difficult to operate and maintain, has a high risk of use, has high measurement accuracy/accuracy, and has a complicated work system that requires special/certified and certified training.

4. LEGAL BASIS


- 4.1. RI Minister of Education and Culture No. 3 of 2020 concerning National Higher Education Standards
- 4.2. Permenpan RB No. 03 of 2010 concerning Functional Positions of Educational Laboratory Institutions and Credit Scores

5. TERMS OF SERVICE

- 5.1. List of category 1, 2, and 3 tools (Appendix)
- 5.2. **For Lecturers and students of the Biology and FMIPA clusters**

Category 1 equipment

 - a. Go through the loan procedure
 - b. Operate independently
 - c. Report damage when borrowing to PLP/Laboran and make a statement willing to replace the damage
 - d. Replace damaged equipment in accordance with the agreed time

 <p>UNIVERSITAS NEGERI JAKARTA Mencerdaskan dan Memartabatkan Bangsa</p>	<p>MINISTRY OF EDUCATION AND CULTURE STATE UNIVERSITY OF JAKARTA</p> <p>BIOLOGY LABORATORY & BIOLOGY EDUCATION</p> <p>FACULTY OF MATHEMATICS AND SCIENCE</p> <p>Hasjim Asjarie Building Lt 8-9 Jl. Rawamangun Muka Jakarta 13220 Tel/Fax 021-4894909</p>	<p>STANDARD OPERATING PROCEDURE (SOUP)</p>	
		<p>EQUIPMENT LOAN</p>	
		<p>No. Document</p>	
		<p>Edition</p>	<p>01</p>
		<p>Revision</p>	<p>00</p>
		<p>Is effective</p>	<p>2022</p>
<p>Page</p>	<p>2 - 8</p>		

Category 2 equipment

- Go through the loan procedure
- operation of the tool by first going through a brief training from the PLP/Laboran
- Does not require assistance when using the tool
- Report damage when borrowing to PLP/Laboran and make a statement willing to replace the damage.
- Replace damaged equipment in accordance with the agreed time

Category 3 equipment

- Go through the loan procedure
- operation of the tool by first going through a brief training from the PLP/Laboran
- Does not require assistance when using the tool
- Report damage when borrowing to PLP/Laboran and make a statement willing to replace the damage.
- Replace damaged equipment in accordance with the agreed time

For Lecturers and students outside FMIPA


Category 1 equipment

- Go through the loan procedure
- Operates independently
 - Report damage when borrowing to PLP/Laboran
 - Replace damaged equipment after completion of the activity

Category 2 and 3 equipment


- Go through the loan procedure
- operation of the tool by first going through a brief training from the PLP/Laboran
- Requires assistance when using the tool
- Report damage when borrowing to PLP/Laboran
- Replace damaged equipment after the activity

- Loan forms for students and lecturers in biology and biology education can be downloaded on the following page:
<https://fmipa.unj.ac.id/biologi/laboratorium/prosedur-perijinan-pengguna-laboratorium/form-peminjaman-alat/>
- The tool loan form is submitted to the PLP/Laboratory no later than D-7 for practicum and research.

 <p> MINISTRY OF EDUCATION AND CULTURE STATE UNIVERSITY OF JAKARTA BIOLOGY LABORATORY & BIOLOGY EDUCATION FACULTY OF MATHEMATICS AND SCIENCE Hasjim Asjarie Building Lt 8-9 Jl. Rawamangun Muka Jakarta 13220 Tel/Fax 021-4894909 </p>	STANDARD OPERATING PROCEDURE (SOUP)	
	EQUIPMENT LOAN	
	No. Document	
	Edition	01
	Revision	00
	Is effective	2022
Page	3 - 8	


6. PROCEDURE AND SCHEME FOR LENDING EQUIPMENT FOR LECTURERS AND STUDENTS OF THE BIOLOGY AND FMIPA CULTURE

NO.	PROCESS	EXECUTOR				QUALITY STANDARDS		RELATED DOCUMENT
		User	Responsible lecturer	Head of lab	Laboratories	TIME	OUTSIDE	
1	Proposing the use of online tools	v				H-7		Tool loan form
2	Approval by the supervisor		v			15 minutes	The proposal form is corrected by the supervisor	Online forms
3	Approval by the head of the laboratory			v		3 minutes	The proposal form is approved by the head of the laboratory	Online forms
4	Follow up, mapping, assignment and feedback from PLP/ laboratory assistant				v		Briefing on the use of tools by PLP/Laboran	
5	Finished				v			

 <p> MINISTRY OF EDUCATION AND CULTURE STATE UNIVERSITY OF JAKARTA BIOLOGY LABORATORY & BIOLOGY EDUCATION FACULTY OF MATHEMATICS AND SCIENCE Hasjim Asjarie Building Lt 8-9 Jl. Rawamangun Muka Jakarta 13220 Tel/Fax 021-4894909 </p>	STANDARD OPERATING PROCEDURE (SOUP)	
	EQUIPMENT LOAN	
	No. Document	
	Edition	01
	Revision	00
	Is effective	2022
Page	4 - 8	

7. PROCEDURE AND EQUIPMENT LOAN SCHEME FOR LECTURERS AND STUDENTS OUTSIDE FMIPA

NO.	PROCESS	EXECUTOR				QUALITY STANDARDS		RELATED DOCUMENT
		User	Responsible lecturer	Head of lab	Laboratories	TIME	OUTSIDE	
1	Send an application letter sent via biology laboratory email (biologi.unj19@gmail.com)	v				H-7		Letter of application from the relevant agency
2	Response to letter answers from the Biology laboratory via email				v	3 days		
3	Fill out the equipment loan form	v						Online forms
4	Approval by the supervising lecturer/relevant agency		v				The proposal form is corrected by the supervisor/relevant agency	Online forms
5	Approval by the head of the laboratory			v			The proposal form is approved by the head of the laboratory	Online forms
6	Follow up, mapping, assignment and feedback from PLP/Laboran				v		Briefing on the use of tools by PLP/Laboran	

 <p>Mencerdaskan dan Memartabatkan Bangsa</p>	<p>MINISTRY OF EDUCATION AND CULTURE STATE UNIVERSITY OF JAKARTA</p> <p>BIOLOGY LABORATORY & BIOLOGY EDUCATION</p> <p>FACULTY OF MATHEMATICS AND SCIENCE</p> <p>Hasjim Asjarie Building Lt 8-9 Jl. Rawamangun Muka Jakarta 13220 Tel/Fax 021-4894909</p>	<p>STANDARD OPERATING PROCEDURE (SOUP)</p>	
		<p>EQUIPMENT LOAN</p>	
		<p>No. Document</p>	
		<p>Edition</p>	<p>01</p>
		<p>Revision</p>	<p>00</p>
		<p>Is effective</p>	<p>2022</p>
<p>Page</p>	<p>5 - 8</p>		

8. EVENT ORGANISER

- 8.1. Lecturers and students in the biology clump, FMIPA and outside parties
- 8.2. PLP/ Laboratories

9. INTERNAL MONITORING

- 9.1. Report the return of category 1 tools, as well as checking of category 2 and 3 tools to the PLP/ laboratory assistant
- 9.2. Replace the damaged / broken tool by filling out the replacement agreement form broken/broken tool
- 9.3. PLP/Laboran will provide a certificate for making laboratory free certificates, if there is no damage to category 1, 2 and 3 equipment or after replacement of damaged/broken equipment

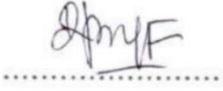
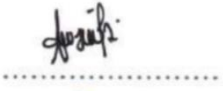



10. EXECUTOR PERFORMANCE EVALUATION


- 10.1. The head of the laboratory evaluates the use of the equipment




11. DOCUMENT CHANGE HISTORY


NO	REVISION TO	REVISION DATE	BEFORE REVISION	AFTER REVISION	MATTER
1	00	18 August 2022	-	-	1- 7

12. ENDORSEMENT

	Name	Position	Signature	Date
Made by	Deselina F	PLP Biology Laboratory		28 August 2022
	Hazleni M, S.Si			
	Sayid R, S.Si			
Checked by	Ns. Sri Rahayu, S. Kep., M. Biomed.	Head of Lab. Biology		5 September 2022
	Ade Suryanda, M.Sc	Head of Lab. Biology Education		7 September 2022

 <p>Mencerdaskan dan Memartabatkan Bangsa</p>	<p>MINISTRY OF EDUCATION AND CULTURE STATE UNIVERSITY OF JAKARTA</p> <p>BIOLOGY LABORATORY & BIOLOGY EDUCATION</p> <p>FACULTY OF MATHEMATICS AND SCIENCE</p> <p>Hasjim Asjarie Building Lt 8-9 Jl. Rawamangun Muka Jakarta 13220 Tel/Fax 021-4894909</p>	<p>STANDARD OPERATING PROCEDURE (SOUP)</p>	
		<p>EQUIPMENT LOAN</p>	
		<p>No. Document</p>	
		<p>Edition</p>	<p>01</p>
		<p>Revision</p>	<p>00</p>
<p>Is effective</p>	<p>2022</p>		
<p>Page</p>	<p>6 - 8</p>		


<p>Endorsed by</p>	<p>Dr. Reni Indrayanti, M.Sc</p>	<p>Study Program Coordinator Biology</p>		<p>12 September 2022</p>
	<p>Dr. Rusdi, M. Biomed</p>	<p>Study Program Coordinator Biology Education</p>		<p>13 September 2022</p>
	<p>Dr. Supriyatin, M.Sc</p>	<p>Study Program Coordinator Master of Biology Education</p>		<p>15 September 2022</p>

 <p style="text-align: center;"> UNIVERSITAS NEGERI JAKARTA <i>Mencerdaskan dan Memartabatkan Bangsa</i> </p>	MINISTRY OF EDUCATION AND CULTURE STATE UNIVERSITY OF JAKARTA BIOLOGY LABORATORY & BIOLOGY EDUCATION FACULTY OF MATHEMATICS AND SCIENCE Hasjim Asjarie Building Lt 8-9 Jl. Rawamangun Muka Jakarta 13220 Tel/Fax 021-4894909	STANDARD OPERATING PROCEDURE (SOUP)	
		EQUIPMENT LOAN	
		No. Document	
		Edition	01
		Revision	00
		Is effective	2022
Page	7 - 8		

Attachment

Category 1, 2, and 3 equipment

Category 1	Category 2	Category 3
Beaker	Waterbath	Real-time PCR
Erlenmeyer	Digital balance	PCR / PCR gradient
Volumetric flask	Biosafety cabinet	Elisha
Measuring cup	Centrifuge	SEM
Measuring pipette	Autoclave	AAS
Mercury thermometer	Laminar air flow	HPLC
Stirring rod	Incubator	
Funnel	Micropipette	
Spatula	Electrophoresis	
Drop pipette	Oven	
Bunsen	Microscope	
Wire netting	PH meter	
Watch glass	Refractometer	
Petri dish	Hotplates & Magnetic stirrers	
Test tube	Analytical balance	

 <p>Mencerdaskan dan Memartabatkan Bangsa</p>	<p>MINISTRY OF EDUCATION AND CULTURE STATE UNIVERSITY OF JAKARTA</p> <p>BIOLOGY LABORATORY & BIOLOGY EDUCATION</p> <p>FACULTY OF MATHEMATICS AND SCIENCE</p> <p>Hasjim Asjarie Building Lt 8-9 Jl. Rawamangun Muka Jakarta 13220 Tel/Fax 021-4894909</p>	<p>STANDARD OPERATING PROCEDURE (SOUP)</p>	
		<p>EQUIPMENT LOAN</p>	
		<p>No. Document</p>	
		<p>Edition</p>	<p>01</p>
		<p>Revision</p>	<p>00</p>
		<p>Is effective</p>	<p>2022</p>
<p>Page</p>	<p>8 - 8</p>		

Test tube rack	Titration tool	
Wood clamp	Vortex	
Mortar/ pestle	UV-VIS Spectrophotometer	
Porcelain cup	Water distillator	
Spray flask	Rotary evaporators	
Capillary pipe	Shakers	
Clamp	Colony counters	
Wire netting		
bulbs		
Drip plate		