

Mencerdaskan dan Memartabatkan Bangsa

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 (SOP)			
USE	OF MATERIALS		
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1. OBJECTIVE

Provides a usage mechanism general materials and special materials for practicum and research activities for lecturers and students in the biology clump, FMIPA and outside parties, as well as excursion studies/field work lectures in the biology clump environment.

2. SCOPE

The implementation of this SOP applies to biology laboratories and biology education at the Faculty of Mathematics and Natural Sciences and external parties, where the implementation of the SOP involves the head of the laboratory, laboratory assistants, lecturers and students, as well as related agencies.

3. DEFINITION

The definition of general and special materials according to Permenpan RB No. 03 of 2010, namely:

General materials are materials whose handling does not require special treatment and requirements.

Special materials are materials whose handling requires special treatment and requirements.

Safety data sheet (SDS) or in the Decree of the Minister of Industry No. 87/M-IND/PER/9/2009 called Material Safety Data Sheet (LDKB) is a guide sheet that contains chemical information including physical, chemical properties, types of hazards posed, handling procedures, special measures in emergencies, disposal and other necessary information.

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
- 4.3. Decree of the Minister of Industry No 87/M-IND/PER/9/2009

5. TERMS OF SERVICE

- 5.1. List of common and specific ingredients (Appendix)
- 5.2. Practicum activities and excursion studies / field work lectures

Use of general and specific materials for practicum activities in the laboratory and in the field, as well as excursion studies / field work lectures:

- a. Go through the loan procedure
- b. The material use form is submitted to the PLP/Laboran at the latest D-7.



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- c. Preparation and manufacture of general and special materials are carried out by practicum assistants and each group (excursion study) under the supervision of a PLP/Laboran assistant.
- d. Procurement/purchase of materials is financed by the laboratory according to the practicum guidebook and proposals for excursion study activities.
- e. Loan forms for biology students and lecturers and biology education can be downloaded on the following page:

https://fmipa.unj.ac.id/biologi/laboratorium/prosedur-perijinanpengguna-laboratorium/form-peminjaman-alat/

5.3. Research activities for thesis students

- a. Go through the loan procedure
- b. The material use form is submitted to the PLP/Laboran at the latest D-7.
- c. Preparation and manufacture of general and special materials are carried out independently under the supervision of the PLP/Laboran.
- d. The use of materials for thesis research students is financed by the lab in accordance with the guidelines for maximum use of materials, use that exceeds the maximum limit will be charged (attachment. Maximum use of materials for thesis research).

5.4. Research activities for FMIPA lecturers and students and external parties

- a. Through borrowing procedures and application letters for external parties in accordance with the materials available in the biology laboratory and submitted to the PLP/Laboran no later than D-7.
- b. Preparation and manufacture of general and special materials are carried out by the PLP/Laboran.
- c. The use of materials is paid at the beginning, according to the calculation of the price of materials, material containers, and fees for making materials according to the SDS category (attachment).



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6. PROCEDURE AND SCHEME FOR THE USE OF MATERIALS FOR BIOLOGY LECTURERS AND STUDENTS

			EXECUTOR			QUALITY STANDARDS		RELATED
NO.	PROCESS	User	Responsible lecturer	Head of lab	Laboratorie s	TIME	OUTSIDE	DOCUMENT
1	Proposing the use of materials online	٧				H-7		Material use forms
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		SDS material briefing by PLP/Laboran	
5	Finished				V			

7. PROCEDURE AND SCHEME FOR THE USE OF MATERIALS FOR FMIPA LECTURERS AND STUDENTS AND OUTSIDE PARTIES



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			EXEC	UTOR		QUA	LITY STANDARDS	DELATED
NO.	PROCESS	User	Responsible lecturer	Head of lab	Laboratorie s	TIME	OUTSIDE	RELATED DOCUMENT
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 material usage 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		SDS material briefing by PLP/Laboran	



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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. Reporting the use of general and special materials to the PLP/ laboratory assistant
- 9.2. Dispose of waste in the space provided
- 9.3. Store leftover materials in accordance with the procedures for storing materials
- 9.4. PLP/Laboran will provide a certificate for making a free laboratory certificate, if the use of materials is in accordance with the procedure

10. EXECUTOR PERFORMANCE EVALUATION

10.1. The head of the laboratory evaluates the use of materials

11. DOCUMENT CHANGE HISTORY

	REVISION				MATTER
NO	то	REVISION DATE	BEFORE REVISION	AFTER REVISION	•
1	00	23 August 2022	-	-	1- 7
2					

12. ENDORSEMENT

	Name	Position	Signature	Date
	Deselina F		StryF	
Made by	Hazleni M, S.Si	PLP Biology Laboratory	dosels.	28 August 2022
	Sayid R, S.Si		So.	
	Ns. Sri Rahayu, S. Kep., M. Biomed.	Head of Lab. Biology	00	5 September 2022
Checked by	Ade Suryanda, M.Sc	Head of Lab. Biology Education	Palal	7 September 2022



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	Dr. Reni Indrayanti, M.Sc	Study Program Coordinator Biology	A with	12 September 2022
		Study	/	
Endorsed by	Dr. Rusdi, M. Biomed	Program Coordinator Biology Education	Mi H	13 September 2022
	Dr. Supriyatin, M.Sc	Study Program Coordinator	Spe	15 September 2022
		Master of Biology Education		



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Attachment

General Materials and Special Materials

NO.	GENERAL MATERIALS	SPECIAL MATERIALS
	Aquades	Ethanol
	Aquabidest	Acetone
	Vaseline	lodine
	Amylum	Sulfuric acid
	Glucose	Hydrochloric acid
	Fructose	Acetic acid
	sucrose	Ether
	gelatin	Methanol
	glycerol	Sulfur
	Methylene blue	Urea
	Eosin	Nitric acid
	Maltose	Formalin
	Lugol	Xylene
	Phenol red	Chloroform
		Agarose
		EDTA
		TAE
		Magnesium
		Mercury
		Potassium iodide
		lodine