DEPARTMENT OF MATHEMATICS EDUCATION UNIVERSITAS PENDIDIKAN INDONESIA	DOCUMENT-LEVEL STUDY PROGRAM	CODE: POB-MAT 007
TITLE: WRITING THESIS ON MATHEMATICS STUDY PROGRAM		Issued date: February 2020
AREAS: ACADEMIC		Revision:

STANDARD OPERATING PROCEDURE THESIS WRITING

A. RATIONAL

The vision of the Mathematics study program at UPI's FPMIPA is as a Pioneer and Superior study program in the field of Mathematics. The realization of this vision in the form of a mission:

- a. Organizing education to prepare prospective mathematicians who are outstanding, creative, superior, professional, and globally competitive;
- b. Researching the field of Mathematics as the basis for the education process and community service;
- c. Organizing community service based on research results in the area of Mathematics,
- d. Organizing the internationalization of education and research through the development and strengthening of networks and partnerships at the national, regional, and international levels; and
- e. Empowering all available resources by utilizing information and communication technology (ICT) engineering in learning and research.

One form of implementation in this mission is to improve the quality of research in mathematics. Specifically, to foster research culture among students, Study Program. Mathematics determines the study of mathematical problems with a weight of 4 credits accommodated in the Capita Selecta Mathematics Course. A thesis with a weight of 6 credits becomes one of the compulsory subjects for students. Thus, before completing their education, all students of the Mathematics Study Program FPMIPA UPI must conduct research.

As with any scientific work, there is scientific accountability in the thesis. In addition, the thesis is also a picture or face that can reflect the quality of students in the intellectual aspect. For this reason, the preparation process requires students' independence, patience, thoroughness, and creativity. For writing a thesis that begins with the submission of problems, the preparation of proposals, the writing of the thesis, and the trial examination, it is necessary to make rules relating to it. With these rules and mechanisms, it is hoped that it will provide

an overview, especially for students of the Mathematics Study Program, to write their thesis smoothly and with quality.

B. REFERENCE

The basis of the preparation of the Standard Operating Procedures for writing this thesis include:

- Presidential Regulation Number 8 of 2012 concerning the Indonesian National Qualifications Framework (KKNI).
- 2. Regulation of the Minister of Research, Technology, and Higher Education Number 44 of 2015 concerning National Standards for Higher Education (State Gazette of the Republic of Indonesia of 2015 Number 1952)
- 3. Curriculum (main provisions of program structure) UPI 2018
- 4. UPI Academic Guidelines 2020
- 5. UPI Strategic Plan 2021-2025

C. AIM

The purpose of the preparation of the Standard Operating Procedures for writing this thesis, in general, is to provide an overview of the mechanism in writing at the Department of Mathematics Education, FPMIPA UPI so that a thesis/final project can be scientifically accounted for and qualified.

In detail, the specific objectives of this POB include:

- 1. Determination of the requirements in writing the thesis.
- 2. Flow in writing the thesis.
- 3. Submission of thesis title/problem (criteria for problem formulation, etc.).
- 4. Determine the rules/references for the systematic writing of the thesis.
- 5. Determine the criteria for supervisors (Advisor I and supervisor II).
- 6. Determine the rules in the proposal seminar for the thesis (proposal evaluation format, examiners, time, and seminar participants).

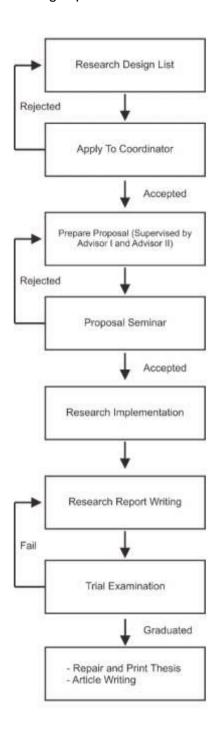
D. Thesis Compilation Mechanism

The following is an overview of the process of preparing this thesis:

Requirements for submitting thesis writing
 The requirements for submitting thesis writing are following UPI's academic guidebook.

2. The scriptwriting flow

The flow of student thesis writing is presented in the following diagram:



Descriptively the flow chart above can be explained as follows:

- a. The student has fulfilled the requirements to contract a thesis according to the academic manual.
- b. The student faces the thesis coordinator (in this case, the head of the KBK: Analysis, Algebra, Applied, and Statistics according to the KBK taken by the student) to submit the title of the thesis proposal.
- c. Students prepare research proposals under the guidance of the coordinator with a maximum duration of two months with a minimum frequency of three times for each supervisor.
- d. Students have two months to complete their Proposal, but if it has not been completed, they must consult again with the coordinator regarding the problem or the title of the thesis drafted.
- e. After the Proposal is approved and signed by the two supervisors; students register themselves to the thesis coordinator for a proposal seminar.
- f. The time (schedule) of the seminar will be determined further by the coordinator by taking into account the UPI academic calendar. The proposal seminar is attended by students who have signed a thesis and their supervisor (at least one) and at least two examiners determined by the coordinator.
- g. Students submit a seminar no later than 2 (two) weeks before the scheduled workshop by bringing a proposal signed by both supervisors.
- h. Students who are declared to have passed the thesis proposal seminar then continue to complete the thesis under the guidance of a supervisor with physical evidence of the mentoring process.
- i. The minimum number of mentoring processes for thesis preparation until being allowed to take the exam is seven times from each supervisor unless there is a recommendation from the supervisor and coordinator.
- j. After the thesis is deemed adequate by being signed by both supervisors, students can register for the undergraduate trial.
- k. Registration for the undergraduate trial examination is carried out after the administrative completeness is fulfilled within a minimum period of two weeks before the trial examination is carried out.
- I. If there are students who do not pass the trial exam, then the student is recommended to take the subsequent trial.
- m. Students are required to compile research articles. With the help of the supervisor, the article was submitted for publication in a scientific journal.

E. PREPARE A DRAFT OF THESIS PROBLEM SUBMISSION

Students submit problems or research titles to the coordinator by bringing a draft research design containing:

- Title (temporary)
- Background
- Formulation of the problem
- Research methods

F. SYSTEMATICS OF WRITING THESIS

References for writing proposals and reports on thesis research results are based on thesis writing guidelines that UPI has published.

G. THESIS PROPOSAL SEMINAR (PROPOSAL EVALUATION FORMAT, EXAMINERS, TIME, AND SEMINAR PARTICIPANTS).

Students can submit a seminar after completing their research proposal two weeks before the scheduled seminar schedule.

- The Coordinator (Chairman of the KBK) establishes a proposal testing team of 4 people (2 supervisors and two examiners).
- 2. The proposal seminar is held at the time determined by the coordinator
- The proposal seminar can be attended by other students and lecturers who are not examiners. Students and lecturers who are not examiners are allowed to provide feedback and suggestions to prospective researchers.
- 4. The final assessment of the results of the seminar proposal is as follows:
 - a. Proposal rejected
 - b. Proposal accepted with improvements
 - c. Proposal accepted without correction

H. SUPERVISOR (SUPERVISOR I AND SUPERVISOR II)

After the Proposal is declared accepted (through a seminar), a thesis supervisor is determined. The supervisor is determined by the coordinator based on the provisions set out in the academic guidelines. In addition, the first supervisor is one of the examiners at the proposal seminar, while the second supervisor is prioritized as one of the examiners of the Proposal. If the lecturer appointed by the second supervisor objected, the coordinator would appoint another lecturer who had met the provisions in the academic guidelines as a supervisor. A lecturer can guide a maximum of 5 students in one semester, either as the first supervisor or supervisor II (except in certain situations, a lecturer can show more than five people). The determination of supervisors I and II is adjusted by taking into account the

expertise and balance of the number of students in each supervisor (fair). The thesis coordinator submits the list of prospective supervisors I and II to the head of the study program. The thesis supervisor is proposed by the Head of Study Program and ratified in a Decree (SK) signed by the dean, with a validity period of 6 months can be extended for six months. After that time, a new decree is issued.

I. MENTORING PROCEDURES

Mentoring takes place comprehensively by both mentors during one semester minimum of 12 meetings. Documentation is recorded in the thesis guidance book signed by the first supervisors and the second supervisor.

J. Post-Exam Session

After the trial examination is deemed to have passed, students must submit research articles to the manager of the Eurekatika journal, signed by the supervisor. The thesis/journal abstract is posted on page 16 of this guidebook (Times New Roman font, size 10, spaced 1). Complete CD Thesis in PDF format is inserted in the space provided on page 16.