DEPARTEMEN OF MATHEMATIC EDUATION UNIVERSITAS PENDIDIKAN INDONESIA	**DOKUMENT-LEVEL STUDY PROGRAM**	**KODE :POB PRODI DIKMAT-016**
TITLE: MATHEMATICS EDUCATION SEMINAR		**Issued date: February 2020**
AREA : LEKTURES		**RevisiON :01**

STANDARD OPERATING PROCEDURE
MATHEMATICS EDUCATION SEMINAR

A. Dasar Pemikiran

The vision of the Mathematics Education Study Program is to become a "Pioneer and Superior Study Program in Mathematics Education at the national level, as well as internationally recognized." In realizing this vision, the Mathematics Education Study Program carries out the following activities: carrying out scientific studies and research in mathematics education and disseminating the results in national and international seminars/conferences and nationally accredited journals and reputable international journals.

One of the scientific studies and research in mathematics education is realized in a Mathematics Education Seminar course. Therefore, the Mathematics Education Seminar (MT401) course is one of the courses that fall into the category of Expertise Courses Group (MKK). All students of Mathematics education must follow this course in Semester 7 or more.

B. Reference

The foundations of the preparation of the SOP for this mathematics education seminar include:

1. Curriculum (main provisions of program structure) UPI
2. Rector's Regulation No. 052 concerning Guidelines for the Implementation of UPI Education
3. UPI Strategic Plan for 2021-2025

C. Aim

The purpose of the SPM course is to facilitate students to build the ability to integrate the knowledge gained, through various previous lectures, both from the group of mathematics courses and educational courses. The integration is focused on efforts to understand a problem in mathematics education in-depth and comprehensively. The process begins with deepening the concept related to the focus of the problem being studied, explaining the issue in-depth and comprehensively, referring to the conceptual framework that has been understood, and reviewing the theoretical foundations so as to

produce a theoretical framework that can be used as the basis for solving the problem under study.

D. Prerequisite and Study Material in SPM Course

1. Prerequisite Material

Students who contract for the Mathematics Education Seminar course must have taken the following courses: Capita Selecta Mathematics for Elementary Education, Capita Selecta for Mathematics in Secondary Education, Mathematics Learning and Learning, Mathematics Learning Evaluation, Curriculum Study, and Mathematics Learning Planning, and Basic Statistics.

2. Study Material

The study material that can be submitted for is mathematics education material or pure Mathematics concepts. If the educational material being studied is expected to be the basis/part of the preparation of the thesis if the concept of Mathematics being studied is expected to be a provision of knowledge in writing pure mathematics papers.

E. Outcome

This course is expected to produce scientific papers or articles containing: (1) problems, studied in-depth (including evidence that the problem is confirmed, the urgency of the problem in the context of mathematics education, and evidence of an element of novelty); (2) conceptual and theoretical frameworks, serve as the basis for problem-solving. In examining these problems, students often require students to investigate empirical data in the Indonesian context. Thus, the output produced can be in the form of scientific articles that are worthy of publication in journals or conference materials

F. Determination of Title and Guidance Process.

a. Mahasiswa mengajukan tema kajian mata kuliah SPM kepada dosen pengampu.
b. Dosen Pembimbing melaksanakan bimbingan kepada mahasiswa pada jadwal perkuliahan yang sudah disepakati bersama mahasiswa.
c. Dosen pembimbing memberikan penilaian terhadap hasil bimbingannya dan hasil presentasi mahasiswa.

F. E. Determination of Title and Guidance Process

a. Students submit a study theme for the SPM course to the lecturer.
b. Supervisors carry out guidance to students on a lecture schedule that has been agreed with students.
c. The supervising lecturer gives an assessment of the results of his guidance and the results of student presentations

G. Implementation Procedure

Lectures are prepared individually, although they are best done in small groups, so internalization and externalization processes occur. The results of individual studies can be carried out in stages through the zemi process. Each student's learning progress can

be monitored and accelerated through group interaction in each zemi process. Lecturers have an important and strategic role in directing the focus of student studies or in scaffolding each process carried out by students (individually or in the zemi process).

To ensure that every lecture conducted is equal, it is perfect if a general and thorough explanation is given to all participating students at the beginning of each seminar lecture process. All students work in more standardized processes.

Each student is encouraged to work systematically and comprehensively, for example, by forming individual portfolios according to the focus of their respective studies. Each student is asked to compile a table like the one below (example) to build their portfolio.

Sub Themes	Reference	Referred substance
Draft		
Problem		
Theoretical framework		

In the example table above, a student, for example, needs ten references to explain the main concepts related to the problem being studied, six references to describe the problem being studied, and ten references to describe the theoretical framework. For each reference, students are asked to write it down in the second column in a way that meets the rules of writing a specific bibliography (agreed). In the third column, students must write down the referenced material's essence from the library that they have read. The essential parts that become the reference material need to be marked (highlighted) so that the lecturer can ensure that students have carried out the process correctly. Each article that becomes a reference is attached to the final project submitted to the supporting lecturer.

The process of filling in the table and the results of the study are presented in stages. The zemi process is carried out by lecturers and students who are members of the same group. Thus, this seminar is not held only once, but many times to see their progress every time. If the student has succeeded in conducting a thorough study and the mastery of the study material is considered sufficient. The new student is asked to write a formal

and comprehensive paper. This is done to ensure that students understand what they have written.

H. Systematics of Writing Papers/Articles.

Title (Bold, Time News Roman (TNR) 13)
Author (Bold, TNR 11)
NIM (Bold, TNR 11)

ABSTRACT (Bold, TNR 10)
(Abstract contains purpose or background, method, conclusion, TNR 9, maximum 160 words)

Keywords:4-6 words (TNR 9)

INTRODUCTION (TNR 12) Contains background, problems, and objectives (writing is not divided into parts but presented in paragraph form)

DISCUSSION (TNR 12) This section contains a study of theory, methods used, instruments, procedures, and/or data analysis)

CONCLUSION (TNR 12) Presenting conclusions related to the Material studied.

REFERENCES (TNR 12). Using the rules in the UPI Scientific Writing

I. **Guidelines for the Implementation of Exams and Assessments**

1. The exam is carried out by the seminar supervisor.
2. The assessment is given by the supervisor after observing the progress of the lecture implementation for 16 meetings and students taking part in the seminar.
3. At the end of the program, students are advised to attend national/international seminars by the Mathematics Education Study Program or publish them in journals.

The Study Program schedules seminars for Mathematics Education Study Program students (SPM participants). The seminar is held for 2 or 3 days; this event trains students to participate in seminars held nationally or internationally.