

Fen Bilimleri Enstitüsü

Matematik Eğitimi Ana Bilim Dalı

Doktora Yeterlilik Sınavı Yönergesi

Matematik Eğitimi Ana Bilim Dalı doktora öğrencilerinden 2020-2021 sonbahar döneminden itibaren Doktora Yeterlilik Sınavına girecek öğrencilerin;

1. Güz dönemlerinde Ekim, bahar dönemlerinde Mart-Nisan ayı ortasına kadar Bölüm Başkanlığı'na bir dilekçe ile başvurarak Doktora Yeterlilik Sınavına gireceklerini bildirmeleri,
2. Dilekçeye ek olarak Bilgi formu ve Transkript sunmaları gerekmektedir.

**MIDDLE EAST TECHNICAL UNIVERSITY GRADUATE SCHOOL OF NATURAL AND APPLIED
SCIENCES MATHEMATICS EDUCATION DOCTORAL PROGRAM**

DOCTORAL PROFICIENCY EXAMINATION

The purpose of the proficiency exam is to provide evidence of doctoral students' skills in conducting independent research and their understanding of major concepts and issues in the field. The exam consists of three major components.

1. Written Examination - Part A: Literature Synthesis (30%)

Purpose: to determine the creative potential of the candidates to pursue doctoral research, to determine the candidates' ability to apply fundamental concepts into a literature synthesis.

- The candidate is expected to construct a literature synthesis based on a problem that she/he will choose.
- The selected topic should not come from the candidate's masters' thesis, but it can be a topic/problem that the candidate may want to pursue in the doctoral dissertation.
- The literature synthesis should comply with APA style (either 6th or 7th editions) in the body and references, by using double space and 12 pts Times New Roman font. The report can be up to 20 pages (excluding references and appendices).
- The due date of the report is on the day of the written examination. It should be submitted to the examination committee.

2. Written Examination – Part B: In-class examination (70%)

Purpose: to assess the candidates' research skills and their understanding of the field. **Areas covered in the exam:**

- Research and Statistics (30%)
- Major Area (mathematics education) – A reading list will be announced by the department (25%)
- Mathematics – Functions, limits, differentiation, integration, and their applications (15%)

3. Oral Examination

Purpose: to observe the candidates' ability to engage in a professional talk and respond to questions and comments about the issues in the field.

The oral examination comprises the topics of written examination (Part A and Part B), as well as the other relevant topics determined by the examination committee.

EVALUATION CRITERIA

Overall of the written exam is evaluated based on the total score received from the examinations. The minimum required point in the examination (totals of written examinations A and B) is 65 (out of 100). Students who score below 65 (out of 100) are considered as unsuccessful.

Candidates who are successful in the written exam are eligible for the oral examination.

Based on the evidence from proficiency examination, it is the responsibility of the examination committee to determine whether or not the doctoral student is qualified and ready to conduct dissertation research and to proceed toward the doctoral degree.

The committee may also require candidates to take additional courses based on their performance in the oral and written examinations.