

Department of Mathematics and Statistics
M.S. Mathematics Education Final Portfolio and Comprehensive Oral Examination
Approval Form

To be eligible to take the Comprehensive Examination, students must:

- a) Have a cumulative grade point average of 3.0 or better across all courses completed in their program;
- b) Have no more than 10 hours of required coursework remaining and anticipate completing this coursework within one calendar year; and
- c) Be formally registered in MAT 603 graduate coursework at NAU at the time of the exam.

The Final Portfolio and Comprehensive Examination Committee shall consist of 3 members. The Committee and topics to be covered shall be selected by the student's assigned departmental graduate advisor in the program, and approved by the Graduate Operations Committee. Where possible, the committee membership should be restricted to those faculty members from whom the student has completed or is in the process of completing coursework in their program.

A student will be tested over three courses, selected with the guidance of the student's advisor and approved by both the advisor and the Graduate Operations Committee. One and only one of these three courses must be a *Content Connections* course. Note: If the oral exam includes courses that are currently in progress, then the exam may not take place until after the 12th week of instruction (after the 4th week of instruction in the summer). The co-chairs of the Committee shall be the committee members from the two selected non-*Connections* courses.

The M.S. Mathematics Education Final Portfolio will consist of a unique (not submitted as part of a previous course) body of work that documents and analyzes the ways in which a candidate applies key ideas from at least the two selected non-*Connections* courses to the candidate's instructional practices. A brief description of which courses the candidate has selected for the Portfolio project, why the courses have been chosen, and how the courses will demonstrate evidence of application to practice shall be completed at the bottom of this form. Prior to facilitating the Portfolio project in the classroom, candidates are **STRONGLY ENCOURAGED** to submit lesson and/or unit sequence, as well as data collection and analysis plans to the committee members to ensure that the application of program ideas to instructional practices are properly demonstrated via this Portfolio project.

The M.S. Mathematics Education Comprehensive Oral Exam typically lasts 2 hours. Approximately one hour focuses conversation on the Final Portfolio project and the relationship between the ideas focused on in the project and other essential ideas from the M.S. Mathematics Education program and the broader mathematics education community. The other hour will focus on the *Content Connections* course so that the candidate can demonstrate deep understanding of the mathematical content from the chosen course and make connections between the many key pedagogical concepts learned and applied throughout the program.

A near-final draft of the M.S. Mathematics Education Final Portfolio must be submitted to the two appropriate members of the committee at least 6 weeks before the scheduled M.S. Mathematics Education Comprehensive Oral Exam date. M.S. Mathematics Education

faculty will notify the candidate within at least 4 weeks of the scheduled exam date to determine if the candidate is prepared to successfully demonstrate evidence of program ideas to practice or whether the candidate should spend more time working on the Portfolio and should reschedule the Comprehensive Oral Exam. Additionally, candidates must schedule and hold a conference with their *Content Connections* instructor prior to 4 weeks of the scheduled exam date and successfully demonstrate they are prepared to discuss that course at their Exam. The Comprehensive Oral Exam may not occur until all committee members deem the Portfolio ready for defense.

At the end of the Comprehensive Oral Exam a discussion of the Committee members shall occur, with a vote taken following the discussion. The committee members may vote to pass or fail. If a two-thirds majority is not obtained to pass, then the candidate fails the examination. The oral exam on the same set of course work may be retaken after a period of one month has passed. Should the candidate fail the comprehensive exam a second time, then enrollment in the program will be terminated. The Chair of the Oral Committee will promptly convey the result (pass/fail) of the exam to the Chair of the Graduate Operations Committee.

Student name/signature/date

Degree program GPA

Proposed committee co-chair name (Pedagogy Course 1) proposed course

Brief description of why this course was selected:

Proposed committee co-chair name (Pedagogy Course 2) proposed course

Brief description of why this course was selected:

Proposed committee member name (Connections course) proposed course

Brief description of why this course was selected:

Graduate advisor name/signature/date

Chair Graduate Operations Committee name/signature/date