

University of Texas at El Paso

College of Education

TED6305: PRACTICUM IN MATHEMATICS EDUCATION RESEARCH

Objectives:

- Students will be introduced to Mathematics Education research planning, design, and implementation processes
- Students will develop a research/ teaching experiment plan for chosen activity
- Students will design evaluation instruments (quizzes, surveys, interview questionnaires, video analyses, etc.) to assess students' pre- and post conceptual understanding of math concepts/ attitudes/ dispositions
- Students will gain an experience of publicly presenting, discussing, and defending their research results
- Students will write a manuscript for publication based on the research conducted

Timeframe:

Stage-1 – start research planning and IRB process, contact one of the local schools to conduct research and data collection, start lesson planning and developing assessment instruments

Stage-2 – continue working on planning and designing pre- and –post assessment tools

Stage-3 – conduct research activities in one of the local schools, collect the data, and prepare the presentation on research results

Stage-4 – presentation, discussion and defense of research outcomes, writing the report/ manuscript for possible future publication

Final Portfolio includes:

1. Research Plan
2. Intervention Activities
3. Assessment Instruments
4. Student Work
5. Draft of the Manuscript

Grades determined by the usual cutoffs (90-80-70-60), based on two parts:

- A. Portfolio (70%) – students will conduct study in mathematics education and submit a portfolio. Student work and data form with collected evidence will be attached to the report. The report must be written in APA style (American Psychological Association, 5th edition) with appropriate and complete citations, search www.apa.org.
- B. Proposal Presentation (30%) - students will give a 30 min Power Point presentation on the conducted study.