

Mathematics Education Practicum

15:254:644:C1

Summer 2018

Credits and Meetings by Arrangement (BA) – typically 3 Credits

Instructor: Carolyn A. Maher	carolyn.maher@gse.rutgers.edu
Phone Number 908-400-9793 (cell)	10 Seminary Place, Room 231
Office Hours: individually, by appointment	Prerequisites or other limitations: none
Mode of Instruction: <input type="checkbox"/> Lecture <input type="checkbox"/> Seminar <input type="checkbox"/> Hybrid <input type="checkbox"/> Online <input checked="" type="checkbox"/> Other	Permission required: <input type="checkbox"/> No <input checked="" type="checkbox"/> Yes Directions about where to get permission numbers: from Tannan Wilson Tannan.wilson@gse.rutgers.edu

Learning Goals

1. Students will gain experience in preparing/carrying out research projects in mathematics education
2. Students will gain experience in one or more modes of data analysis
3. Students will have opportunity to refine/provide feedback to authors of VMC Analytics for publication on the VMC; guidelines for working with instructor will be provided.
4. Students will have opportunity to construct VMC Analytics; see tutorial on VMC.
5. Students will have opportunity to review/analyze video data from unpublished studies
6. Doctoral students will make progress toward working on a component of a research study

Course Catalogue Description

Mathematics Education Practicum is based on engaging in research projects and advancing knowledge and expertise for doing research in an area of interest. Students will have access to data collections, new tools and web-based technology, specifically the Video Mosaic Collaborative (VMC; see www.videomosaic.org). Opportunities to engage in research will be made available for students to expand or refine existing work and build on prior knowledge and experience. For each project, students will have an opportunity to work independently or may choose to work with a partner or small group to contribute to an aspect of a research goal.

Grading and Activities

Successful completion of the course requires that you identify a project and engage in an appropriate and approved set of activities to advance your work. A schedule for completion should be outlined early in the course, in consultation with the instructor and/or group leader.

In consultation with the instructor, students will establish project goals, and design a plan and timeline for carrying out the work, reporting modifications and progress. The instructor must approve all projects. Students are expected to revise work based on input from the instructor, partners, and or colleagues, as appropriate.

Grading

Students who (1) meet their project objectives successfully or (2) create a VMCAntalytic approved for publication, will receive a grade of A. Otherwise, a grade of Incomplete will be given in order to extend time needed for completion, no later than the beginning of Fall semester, 2018. All students are required to complete a reflection paper at the end of the course.

Those students who choose to work on the VMC, either by revising VMCAntalytics from other courses in preparation for publication or creating new VMCAntalytics, will be expected to share their analytics with outside reviewers. In order for analytics to be accepted for publication, revisions may be required and modifications made.

Activities

Project work may include advancing earlier work or joining a new project, facilitated within small group structure or led by a doctoral student. When joining a group project, the details of project assignments will be communicated to you during an organizational meeting held on-campus prior to the beginning of this course (May 10, 4:00-5:30 pm, Room 211, GSE). Students unable to attend this meeting should contact the instructor by email (carolyn.maher@gse.rutgers.edu). Relevant materials and information will be shared at this meeting.

For group projects, students will be responsible for completing the individually assigned portion of the work within the allotted time period. Although time will be spent working individually, all are expected to maintain appropriate communication with group members, in person or online. Meetings will be scheduled as needed with individuals and/or small groups to provide guidance with project work.

Online Platform

Final project report and reflection papers are due at the completion of each project. The work for each project will be submitted to the instructor (and group project facilitator, if you are working on a special group project). Guidelines will be provided. Platforms, such as Go to Meeting, will be used.

Description of Activities

Project work connects to currently ongoing research of the Robert B. Davis Institute for Learning and/or current doctoral dissertation work.

Samples of projects offered for Summer 2017 include the following:

1. Verifying/transcribing/coding video data
2. Reviewing video clips and full videos for making VMC Analytics
3. Revising draft VMCAntalytics for publication on the VMC
4. Creating new VMCAntalytics for publication
5. Reviewing VMCAntalytics in progress using a rubric to provide feedback to authors
6. Moving forward in developing individual research initiatives (BA with instructor)

Research in progress will be shared at the organizational meeting at beginning of the course or in a Go to Meeting, online format. Students will be individually guided by the instructor in the selection of an appropriate project(s) based on their backgrounds, interest and what will advance them on the trajectory of assisting in scholarly work and research and preparing to conduct individual research in mathematics education. Students pursuing advanced degrees are encouraged to gain experience with more than one project. Pre-qualifying doctoral students will be prompted to consider topics and methods towards development of their own dissertations.

Course Schedule

1. Organizational Meeting: May 10, 4:00-5:30 (Graduate School of Education - GSE, Rm 211); also, Online, TBA
2. Identification of Project: June 8
3. Interim Project Report 1: June 15
4. Interim Project Report 2: June 29
5. Online Sharing of Projects: TBA

Small Group Arrangements

As appropriate, arrangements should be made that include collaborative group work, on-line or in person, as appropriate to the project requirements. Although most of the work is individual in nature, each project involves some level of collaboration.

1. For data coding teams, developing reliability in scoring data is important and there needs to be an opportunity for resolution of differences.
2. For teams that are developing/evaluating VMC Analytics, review and feedback for both Event Descriptions and Video Clips are essential.
3. For teams working on literature reviews, summaries of relevant articles will be required

Academic Integrity

The highest standards of academic integrity are expected of all students. The failure of any student to meet these standards may result in suspension or expulsion from the university and/or other sanctions as specified in the academic integrity policies at Rutgers University.

Violations of academic integrity include, but are not limited to: cheating, fabrication, tampering, plagiarism, stealing, or facilitating such activities. The university academic integrity policies are available at the link below: <http://academicintegrity.rutgers.edu/integrity.shtml>

Students with Disabilities

Rutgers University welcomes students with disabilities into all of the University's educational programs. In order to receive consideration for reasonable accommodations, a student with a disability must contact the appropriate disability services office at the campus where you are officially enrolled, participate in an intake interview, and provide documentation: <https://ods.rutgers.edu/students/documentation-guidelines>. If the documentation supports your request for reasonable accommodations, your campus's disability services office will provide you with a Letter of Accommodations. Please share this letter with your instructors and discuss the accommodations with them as early in your courses as possible. To begin this process, please complete the Registration form on the ODS web site at: <https://ods.rutgers.edu/students/registration-form>.

