This course supports the assessment for the MA, Mathematics Education (K-6) Capstone. The course represents 6 competency units.

**Introduction**

The capstone is the culminating assessment of your WGU master's degree program. This capstone project presents you with an opportunity to demonstrate mastery in all four of the primary areas of this degree program: design, evaluation, problem-solving, and leadership. You will be required to identify a problem in the area of elementary school (K-6) mathematics and conduct an action research project that will help shed light on a possible solution to this problem. A fundamental component of this action research project will be a unit of instruction that is designed to address the identified problem. This unit of instruction will act as the "intervention" that is used to address the problem. You will be required to "test" this intervention on a student population, gather the appropriate data, analyze those data and draw conclusions about the intervention based on those data.

**Getting Started**

Welcome to the MA, Mathematics Education (K-6) Capstone! In this course, you will demonstrate competency by completing a capstone research study that includes a prospectus, attainment of IRB approval, a written report, and a multimedia presentation. Begin by familiarizing yourself with the resources, task instructions, and templates within this Course of Study. You will not be able to access the tasks in your course until you have completed your Academic Action Verification (AAV) call with your mentor who will lock the Capstone Project assessments into your term. Once you are enrolled in your capstone course, you will be assigned a Course Instructor who will guide you through the process of completing each task.

**Capstone Requirements**

- The instructional unit must be 8-10 hours long and will include the presentation of information, practice, feedback, and assessment components.
- The instructional unit must be 80% of your own original work - materials from other sources cannot be the primary source of content and exercises.
- Technology may be incorporated as a tool for learning.
- The instructional unit must incorporate recent elementary school mathematics strategies to support student learning in mathematics.

The capstone requires that you write academically at the graduate level, adhering to APA and Articulation standards. Please bear in mind that your capstone is the culminating project of your degree program. Thus, it should represent your best writing. To meet these standards WGU has prepared a [Guide to Academic Writing](#). Use the 6th editions of the APA Publication Manual for formatting guidance.
Upon completion of the written capstone project, you are required to prepare a multimedia presentation (e.g., PowerPoint, PDF) that outlines your project. In the presentation, you will detail the problems you investigated, state and answer your research questions, describe the methodology you used, present the data you collected, describe the results of your data analysis, summarize your conclusions, and describe strengths and weaknesses of your project.

**Field Placement Requirements**

Prior to beginning any in-school activities for this course, you are required to complete your field experience application. The instructional unit/intervention being used to address the specific problem is considered a practicum activity, which necessitates approval obtained through this application process.

Open your Degree Plan and click on the "Field Experience" button at the top to access your application. You will see your field experience requirements listed. Instructions are provided on the page, and you may also work with your Program Mentor if you have any questions related to your application process. All requirements must be completed so that you may be approved prior to beginning any in-school activities for this course or submitting any tasks.

In extremely rare cases, when students find it impossible to undertake the capstone work as directed in their course, and in consultation with their Course Instructor and Program Mentor, they may make an appeal for the Capstone Exception to meet the Capstone requirement. It should be noted that an end of term or end of a K-6 school year would not qualify for the Capstone Exception.

All requirements must be completed so that you may be approved prior to beginning any in-school activities for this course or submitting any tasks.

**Preparing for Success**

Your capstone experience will be more successful if you plan well. This requires an understanding of all capstone requirements. The number of Competency Units (CUs) assigned to the capstone assessments means that it constitutes the work of about three quarters of a graduate term. For this reason, the capstone process is equivalent to a period of 16 weeks. However, capstone work does not always allow for such continuous linear progression. In fact, completing a capstone project within this timeframe would require ideal conditions. For example, one thing that may affect such a schedule is evaluation of each task. If revisions are required after each evaluation, this will add more time to the process. Capstone work cannot be, and should not be, rushed.

**Prospectus (Task 1)**

In this task you will use the Capstone Prospectus Template to outline the problem that you intend to investigate, describe the proposed solution to the problem (your instructional unit/intervention),
describe the participants in your study, and state your research questions. You will then describe the data you intend to collect, and the data analysis you propose to conduct once you have gathered the data.

If you need help with starting this task, please view the following video which provides an explanation of the task requirements.

Note: There are references within this video to Taskstream. If Taskstream is not part of your student experience, please disregard, and locate your task(s) within your course.

- Task 1 Instructional Video Recording

Please be aware that this task must be evaluated and passed before you move forward with the remaining tasks found in the capstone project assessment.

**IRB Approval Process (Task 2)**

After your prospectus has been approved, you will address the issue of human subjects in research. If you have any human subjects participating in your project, these subjects will need to sign the Informed Consent Form. This form explains how your research will deal with issues concerning human subjects. Data may be collected only after the forms have been signed by the school or district administrator and the study participants. Informed consent forms must also be collected from study participants.

The entire process for obtaining approval from the IRB is outlined in Task 2. The process includes reviewing basic information regarding conducting research with human subjects, taking a quiz to demonstrate understanding, completing an IRB review application, and obtaining Informed Consent. Please confer with your Course Instructor regarding the required procedures for obtaining IRB approval.

There are three items to upload for Task 2:
1. IRB Information Exam responses:
   a. Click the box in the exam to have your responses emailed to you
   b. Copy and paste the email text into a Word doc for uploading
2. Informed Consent form with only the administrator or designated official signature included
   a. Scan to a PDF for uploading
3. Request for Approval to Conduct Research form (no signatures)

After Task 2 passes, you will be free to teach the instructional unit and to collect data.

If you need help with starting this task, please view the following video which provides an explanation of the task requirements.

Note: There are references within this video to Taskstream. If Taskstream is not part of your student experience, please disregard, and locate your task(s) within your course.

- Task 2 Instructional Video Recording
First 3 Chapters: Introduction, Literature Review, and Methodology (Task 3)

Once you have obtained your subjects’ consent to participate in your study, you will then need to submit Chapters 1-3 of your research study using the required Capstone Template. In this task, you will provide an introduction to the problem that you intend to research during your capstone project. You will state and provide the context for your research questions, via a review of relevant literature. You will also describe the data collection and analysis methods you will use in the project.

If you have not already purchased the APA Style Manual, you may wish to do so. Additionally, here are two useful APA format websites you may wish to consult: WGU’s APA Formatting Guide and Purdue OWL.

If you need help with starting this task, please view the following video which provides an explanation of the task requirements.

Note: There are references within this video to Taskstream. If Taskstream is not part of your student experience, please disregard, and locate your task(s) within your course.

• Task 3 Instructional Video Recording

Chapters 4 & 5: Data Analysis, Results, and Conclusion (Task 4)

Once you have finished with data collection and task 3 has passed, you will need to summarize your data, analyze it, and present your results. How does the data you collected allow you to answer your research questions? What additional issues or questions does it raise? You will then reflect on the project, and make recommendations as to what you might do differently if you were to implement it again in the future.

You will also include, in the Appendices, all of the materials you used in the completion of your project. This includes any curricular materials you developed and data collection instruments used.

If you need help with starting this task, please view the following video which provides an explanation of the task requirements.

Note: There are references within this video to Taskstream. If Taskstream is not part of your student experience, please disregard, and locate your task(s) within your course.

• Task 4 Instructional Video Recording

Final, Complete Written Report (Task 5)
In this task you will create a single document that contains your entire written capstone report, including a table of contents, abstract, and appendices. Compile the final written report using the required Capstone Template. You will also create a multimedia presentation that summarizes the key elements of the capstone project.

If you need help with starting this task, please view the following video which provides an explanation of the task requirements.

Note: There are references within this video to Taskstream. If Taskstream is not part of your student experience, please disregard, and locate your task(s) within your course.

- Task 5 Instructional Video Recording