

WHAT IS MRWC?

The MRWC is designed as a 4th year mathematics course following Math I - III (or Alg I - II and Geometry) that will provide a bridge into multiple college and career options, including STEM, CTE, and non-technical pathways. Students successfully completing MRWC will have acquired content skills and attitudes towards learning that will be expected in entry-level college mathematics.

MRWC addresses the full scope of advanced mathematical topics in a way that is substantively different from the traditional curriculum. The distinctiveness of MRWC lies in its unique design and topic sequencing, and in the emphasis on instructional delivery that promotes exploratory and collaborative student engagement.

Based on the Common Core State Standards viewpoint that mathematics is a cohesive and connected body of work, the MRWC is structured to highlight overarching themes in mathematics that are intrinsic to and underlie many topics in the high school curriculum. The themes provide a mechanism for expanding existing content into new, advanced areas in a way that makes explicit the connectedness between old and new topics that might otherwise appear to students to be unrelated. They provide consistent threads that help students grasp why the 'rules' are the way they are as well as the constraints under which those 'rules' operate. The themes are

1. Reasoning with Numbers
2. Reasoning with Functions
3. Reasoning with Equivalences
4. Reasoning with Distance

MRWC seamlessly interweaves the CCSS Mathematical Practices throughout the curriculum and develops key Habits of Mind and a mathematical disposition required for attaining high-level content knowledge. A distinctive aspect of MRWC is a consistent emphasis on discussion and analysis of alternative representations and multiple perspectives for approaching and understanding content. It is designed to encourage strategic and flexible mathematical thinking as well as to enable students to become self-reflective learners.