

Student Attributes for Math Success

Demonstrates intellectual engagement.

- Perceives mathematics as a way of understanding — a view that mathematics must make sense, and is not a sequence of algorithms to be memorized and applied.
- Actively explores new ideas, posing questions about their meaning, significance, and implications.
- Recognizes patterns—as well as deviations—from previously learned patterns in data, diagrams, symbols, and words.
- Appreciates that abstraction and generalization are important sources of the power of mathematics.
- Is willing to take risks and be challenged as part of the learning process.
- Contributes to and benefits from group problem-solving activities.

Takes responsibility for own learning.

- Attends nearly every class session and when absent, seeks ways to learn the material covered in class.
- Conscientiously prepares work assigned for class.
- Examines and learns from his or her errors and seeks help when needed.
- Takes advantage of available resources — class time, notes, textbook, assignments, tutoring services, supplemental materials.

Perseveres when faced with time-consuming or complex tasks.

- Sets aside the time necessary to be successful.
- Is willing to work on problems that require time and thought, particularly problems that cannot be solved by mimicking a previously seen example.
- Successfully completes tasks that require organizing and implementing multiple steps, concepts, or techniques.
- Recognizes when an approach is unproductive and makes logical modifications to that approach or switches to another approach.
- Is convinced that effort is an important component of success in mathematics.

Pays attention to detail.

- Correctly follows all parts of oral and written directions without needing additional reminders.
- Makes few notational errors, e.g., accidentally changing digits, dropping or altering algebra symbols, incorrectly positioning points on a grid, etc.

Secondary Mathematics Sequence

