

Course Title: Advanced Math: College-Prep Essentials

Teacher: Grant Goettl

Hour 2 - Semester 1 - 2021/22

0.5 Math Credit

COURSE INFORMATION:

Click [here](#) to hear Grant talk about his class!

Course Description: Are you done with Algebra 1 and Geometry and are planning on going to college (including Madison College/MATC) or at least want to keep the doors to college open, then this class is for you. This course covers much of the material that would appear in the first part of an Algebra 2 course. It encompasses the vast majority of what the UW System University and 2-year transfer colleges have stated is “assumed prior knowledge” in order to take a [credit-bearing math course](#) at the postsecondary level. This course is an indispensable part of your postsecondary action plan as you reach to make your goals a reality.

Prerequisites: Algebra 1 and Geometry

Method of Instruction: Lecture, traditional quizzes and tests, and practice multiple choice exams that resemble the ACT and college placement tests.

Course Objectives (a few selected standards):

- **The Complex Number System: Use complex numbers in polynomial identities and equations**
- **Arithmetic with Polynomials and Rational Functions: Understand the relationship between zeros and factors of polynomials**
- **Reasoning with Equations and Inequalities: Solve systems of equations**
- **Interpreting Functions: Analyze functions using different representations**
- **Expressing Geometric Properties with Equations: Translate between the geometric description and the equation for a conic section**

Graduate Vision Competencies: Growth Mindset (Takes Personal Responsibility) and Critical Thinker