# Modern Geometry Syllabus



Teacher: Mr. S. Brown Classroom #: 304 Email: <u>SBrown1@waterbury.k12.ct.edu</u> Office Hours: After school by appointment only

## Wilby High School Core Values and Beliefs:

The students, faculty, staff, and administration of Wilby High School will work cooperatively with families, members of the community, and the Board of Education to create a safe, welcoming, and academic environment which embraces, challenges, and nurtures the diverse talents, interests, and learning styles of all its students.

All students will leave Wilby High School with the self-respect, respect for others, knowledge, and 21st century skills necessary to become independent, intellectually curious, and self-fulfilled members of society.

#### Wilby High School's 21st Century Expectations for Student Learning:

Academic Expectations Effective Reader Effective Writer Effective Problem Solver Self-Directed Learner

*Civic Expectation* Community Contributor

*Social Expectations* Respectful Person Collaborative and Cooperative Worker

#### Course Description from the Wilby H.S Program of Studies:

Prerequisite: Successful completion of Algebra 1

Students discover, explore and make conjectures about geometric concepts and relationships including parallelism, congruence, similarity, area, volume, trigonometry and coordinate geometry. Emphasis is placed on discovery of patterns, real life problem solving using technology, mathematical connections to other disciplines, critical thinking, reasoning, and communicating mathematics. Algebra skills are reviewed and strengthened throughout the course through the application of geometric concepts. Preparation for the SAT is an important part of Geometry.

## Classroom Materials:

- 1. Textbook: <u>Geometry- Concepts and Skills</u> McDougal Littell
- 2. Notebook or Binder
- 3. Folder- for any assignments, handouts, and homework
- 4. TI-84 Plus Calculator

## Topics to be covered:

| Units                        | Торіс   |  |
|------------------------------|---|--|
| 1.                           | Lines Points and planes                                 |  |
| 2                            | Line and Angle Bisectors and construction               |  |
| 3                            | Dilations & Scale factors                               |  |
| 4                            | Transformations and Coordinates                         |  |
| 5                            | Congruency statements with postulates & Proofs          |  |
| 6                            | Polygon classifications & interior & exterior angles.   |  |
| 7                            | Similarity statement with postulated & Proofs, Splitter |  |
|                              | Theorem,  |  |
| 8                            | Circles and Other Conics                                |  |
| 10                           | Three Dimensional Geometry                              |  |
| 11                           | Applications of Probability                             |  |
| 12                           | Trigonometric functions                                 |  |
| Mid-Term Exam (January 2017) |   |  |
| Final Exam (June 2017)       |   |  |

#### Grading Scale:

| Assignment Type             | Weighted Average |
|-----------------------------|------------------|
| Assessments                 | 60%              |
| Classwork                   | 20%              |
| Disposition toward learning | 10%              |
| Homework                    | 10%              |
| Total                       | 100%             |

# Common Formative Assessments: (CFA)

CFA's will be given before, during, and at the end of each unit to assess your individual progress within the lessons. They will be graded on a *Wilby H.S. 21<sup>st</sup> Century Student Learning Expectation Rubric*.

# Make-up Assignments:

Students who are absent on the day the assignment is given, have <u>3 Days</u> to make-up the work before it is marked "LATE". If you are absent on the day an <u>Exam</u> is given, you must take it on the day you return to school.