

# Course Overview

Content Area:

Course(s):

Time Period: **Year**

Length: **180**

Status: **Published**

## Course Overview

**Aligned to Standards:** NJSLs 2023

**Revision Date:** 2024

In compliance with the NJ Student Learning Standards, climate change, career readiness, DEI (Diversity, Equity, & Inclusivity), as well as other standards have been integrated within the NBCRSD curricula (NJ Administrative Code Title 6A: chapter 8; Title 18A: chapter 35).

### Course Overview

**Sequence- Unit Titles, Summaries, and Number of weeks per unit (total = 18 semester/36 year)**

#### Unit 1: Congruence

- The congruence unit focuses on congruence and transformations resulting in congruent figures. The lessons include the definitions of congruence and congruence transformations. Students will be provided with, and create, examples to help them determine if figures are congruent. The topic explores various triangles and defines congruence theorems that prove triangles are congruent given angles and sides of the triangles.

#### Unit 2: Similarity

- The Similarity Unit begins with an examination of dilations and similarity transformations. These concepts are then applied to triangles; students examine the criteria for proving two triangles similar and analyze similarity in right triangles, including applications of the geometric mean. Finally, students consider proportions in triangles.

#### Unit 3: Circles

- The circles unit begins with an examination of arc length, sector area, segment area, and an introduction to radians as a unit of angle measure. Students then examine properties of tangents, chords, and inscribed angles. Finally, students learn about the properties of angles, arcs, and segment lengths that are formed when two lines intersect inside or outside a circle.

#### Unit 4: Measurement

- Measurement involves finding area and volume of two and three dimensional figures. A focus of examining the relationship between the numbers of faces, vertices, and edges in polyhedrons. Students will examine cross sections and determine the three-dimensional figure formed by rotating a two-dimensional figure. Students consider the volume of oblique solids by comparing the cross sections of the oblique solid to corresponding right solids. Throughout the topic, students apply the volume formulas for prisms, cylinders, pyramids, cones, and spheres to solve problems.

[Reporting Student Progress](#) (link to NB's Assessment System)

All courses follow a balanced assessment system with Practice and Assessments.  
Each category includes formative, summative and alternative assessments.

**[Accommodations and Modifications](#) (link to menu)**

Integrated accommodations and modifications for special education students, English language learners, students at risk of school failure, gifted and talented students, and students with 504 plans.