Geometry CP Syllabus

Course Details

Course Code: 412200CW

Subject: Mathematics

Required Prerequisites: Algebra 1

Suggested Prerequisites: None

Recommended Grade Levels: 9-12

Duration: Yearlong

Course Availability: A listing of when this course is offered in the current school year can be found on the VirtualSC Current Course Offerings page (opens in a new window).

Class Times: This course has scheduled instructional meetings. Information on scheduled meetings for each course is communicated by the teacher. Recordings of these meetings will be available for students unable to attend. Students should expect to spend 7-9 hours a week working on this course independently, in addition to any live meetings, and are expected to meet the deadlines posted in the course pacing guide.

Textbook: None – All content can be found in the course. Portions of this course were modified from content from CK-12 under the Creative Commons Attribution NonCommercial 3.0 Unported (CC BY-NC 3.0) license.

Required Course Materials:

1. Protractor
2. Compass
3. Ruler
4. Graph Paper
5. TI 83/84 Graphing Calculator. If a calculator cannot be purchased or is unavailable, you may go to www.desmos.com (opens in a new window), which

can be used on your computer or downloaded to your Android or Apple phone or tablet.

Outside Websites: A list of links to websites and online textbooks used in this course can be found here: VSC Course Links Document Folder (opens in a new window). Students will need to be able to access all of these links to access all course materials.

Final Exam: Students in this course take a VirtualSC final exam. Details on scheduling and taking final exams can be found on the Final Exam Page (opens in a new window) of the VirtualSC webpage.

Course Description

In this course, students are expected to apply mathematics in meaningful ways to solve problems that arise in the workplace, society, and everyday life through the process of modeling. Mathematical modeling involves creating appropriate equations, graphs, diagrams, or other mathematical representations to analyze real-world situations and solve problems. Use of mathematical tools is important in creating and analyzing the mathematical representations used in the modeling process. In order to represent and solve problems, students should learn to use a variety of mathematical tools and technologies such as a compass, a straightedge, graph paper, patty paper, graphing utilities, and dynamic geometry software.

The curriculum used in this course is guided by the South Carolina Mathematics Academic Standards.

Scope and Sequence

- Orientation & Introduction
- Unit 1: The Foundations of Geometry
- Unit 2: Logic, Reasoning and Proofs
- Unit 3: Parallel and Perpendicular Lines
- Unit 4: Congruent Triangles
- Unit 5: Relationships within Triangles
- Unit 6: Quadrilaterals
- Unit 7: Similarity
- Unit 8: Right Triangles and Trigonometry
- Unit 9: Transformations
- Unit 10: Circles
- Unit 11: Surface Area and Volume
- Unit 12: Interpreting Data

Students will be sent a full list of assignments and their due dates at the beginning of the course.

Current pacing guides for this course can be found on the Current Course Offerings page (opens in a new window) on the VirtualSC website.

Course Grades

The final grade in this course results from the following:

- Coursework: 80%
- Final Exam: 20%

VirtualSC Details

Information on VirtualSC student guidelines, policies and technology requirements can be found in the VirtualSC Student Support Portal (opens in a new window).