

Geometry, Part 1 (GEOM-041-300-015)

Syllabus

Course Overview

Geometry part 1 covers three major concepts including transformations, proofs, and trigonometry. Along with learning these three pieces of knowledge, the course will also have you develop 21st Century Skills in problem solving as well as the attribute of humility.

Course Learning Outcomes

Geometry Part 1 is designed to deepen your understanding of the space around you. You will study congruence, similarity, properties of shapes, transformations, proofs, and trigonometry. The course has been divided into three major sections so by the end of the course diligent students will be able to master the following skills.

- Transformations: reflect, translate, rotate, dilate geometric objects
- Proofs: use logic and reasoning to proof geometric theorems
- Trigonometry: learn the trigonometric ratios and apply them to solve real life problems

Course Materials

All the materials you need are included in the course. You do not have to buy any additional textbooks.

Students may use a handheld graphing or scientific calculator or a Desmos online calculator (found at desmos.com/scientific or desmos.com/calculator only) during the final exam; no other calculator is allowed.

Assignments

This course is divided up into 16 modules with modules 5, 10, and 14 as review and exam modules. Module 15 is a project module. Each learning module is split into 4 topics and a review and quiz.

Topic Assignments

There are 44 Topic Assignments, one for each learning topic. These Topic Assignments consist of between 5 and 15 questions that are completed via Derivita, which is embedded in Canvas. You will not need to go to any other website to complete assignments.

Topic Assignments can't be resubmitted instead you will get multiple attempts for each question, and then after 3 attempts it will give you a new question.

Practice Quizzes

At the end of each learning module there will be a practice quiz to help prepare you for the module quiz. These quizzes are not graded, and do not impact your overall course grade.

Module Quizzes

In addition to practicing quizzes at the end of each module, there will also be a graded quiz. While module quizzes can **not** be resubmitted for a fee, they will allow for two attempts on each question. You can use your content guide as reference. These quizzes are graded and are calculated into your overall course grade.

Projects

You will be working on your project at the end of each module. Each project is chunked into 2-3 parts, then submitted before the unit exam. These projects will require a presentation of material where you will need to video yourself initially.

Final Project

You will complete a final project in Module 16. This project has you present on three different application problems and how you worked through the defined process of problem solving. For the presentation of material, you will need to introduce yourself.

Content Guides

You will be asked to complete content guides as you work through the course. These guides will help prepare you for the assessments by creating notes of the essential material provided in the lessons. These guides can be used on your module quizzes and exams.

Content guide templates are provided in every learning module and are to be submitted before each unit exam. Modules 1-4 content guides are submitted in Module 5. Modules 6-9 content guides are submitted in Module 10. Modules 11-13 content guides are submitted in Module 14.

Exams

You will complete 3-unit exams and a final exam for this course. The unit quizzes can **not** be resubmitted for a fee, but like module quizzes, they allow for two attempts on each question. The final comprehensive exam requires a score of at least 60% to earn credit for the course. You **can** resubmit the final exam for a fee.

Grading

Your grade in this course will be based on these assignments and exams:

| Assignment and Assessment Chart | | |
|--|----------------|-------------------------------|
| Assignment or Exam | Grading | Percent of Total Grade |
| 44 Topic Assignments | Computer | 20% |
| 11 Module Quizzes | Computer | 35% |
| 11 Content guides (submitted by Unit) | Teacher | 10% |
| 3 Unit Projects | Teacher | 15% |
| 1 Final Project and Presentation | | |
| 4 Exams* | Computer | 20% |

* You must pass the final exam with at least a 60% to earn credit for the course.

Grade Scale

Your letter grade is calculated according to these percentages.

| Grading | Scale |
|----------------|--------------|
| A | 100% – 93% |
| A– | 92% – 90% |
| B+ | 89% – 87% |
| B | 86% – 83% |
| B– | 82% – 80% |

| | |
|-----------------|-----------|
| C+ | 79% – 77% |
| C | 76% – 73% |
| C– | 72% – 70% |
| D+ | 69% – 67% |
| D | 66% – 63% |
| D– | 62% – 60% |
| F (fail) | 59% – 0% |