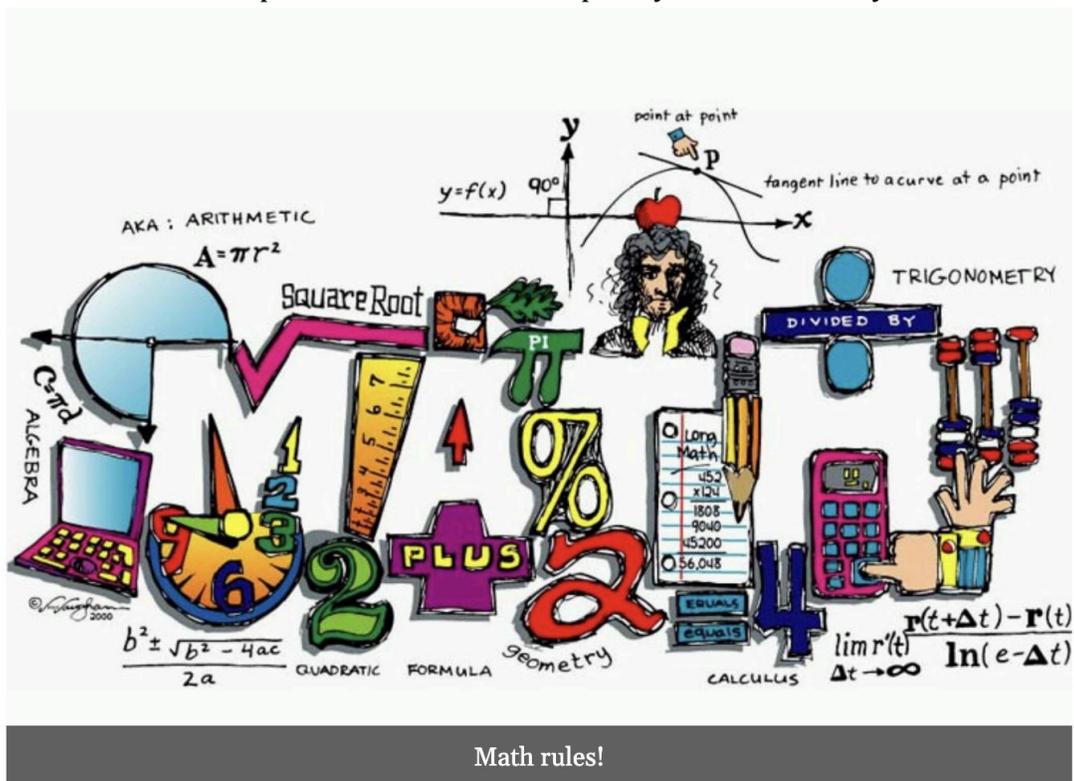


Basic Course Information

Semester:	Spring 2026	Instructor Name:	Jill Nelipovich
Course Title & #:	Math 112: Geometry in Elementary Mathematics	Email:	Jill.nelipovich@imperial.edu
CRN #:	20761	Webpage (optional):	Canvas
Classroom:	2725	Office #:	2760
Class Dates:	2/17/26 – 6/12/26	Student Hours:	MW: 9:30 – 10:00 a.m. 2:30 – 3:00 p.m. Thur: 11:15 a.m.– 12:15 p.m. 5:00 – 6:00 p.m. Zoom by appt.
Class Days:	T/TR	Office Phone #:	760-355-6297
Class Times:	9:40 – 11:05 a.m.	Emergency Contact:	760-355-6201
Units:	3	Class Format/Modality:	Online

Welcome Students! The spring semester will be fun! We get in person learning – which is a HUGE benefit to learning. It provides you the opportunity to collaborate with your peers, get real-time help with questions and create relationships with others that will push you academically.



Your Job:

- Think beyond the usual approach. Set aside what you learned in earlier grades and build your understanding from the ground up. Let yourself grow, explore, and try new ideas—that's how progress happens.
- Study consistently. Review material within 24 hours of class and come to office hours when you need support.

My role:

My goal is to help you succeed—but I need your partnership. That means putting in the time and effort to study, learn, and complete your assignments. I'm here and available to support you along the way.

What this means in practice:

- Do the work and avoid putting off assignments.
- Work a little every day; cramming rarely works.
- Take ownership of your learning. I can guide and support you, but I can't learn the material for you—that part is yours.

What does success look like?

- Doing well in this course and learning the learning the material well so you are confident in the elementary classroom
- Developing strong problem-solving skills for high-stakes situations.

Course Description

This course is a continuation of Math 110 and focuses on the conceptual understanding needed to teach elementary school mathematics. Topics include the geometry, including the development of geometric formulas, transformational geometry, similarity, relationships between shapes, English and metric measurements, Pythagorean Theorem and problem solving. (CSU, UC credit limited. See a counselor.)

Course Prerequisite(s) and/or Corequisite(s)

Successful completion of Intermediate Algebra or appropriate placement as defined by AB705.

Student Learning Outcomes

Upon course completion, the successful student will have acquired new skills, knowledge, and or attitudes as demonstrated by being able to:

1. Demonstrate an understanding of the difference between area and perimeter.
2. Determine the relationship between similar figures.
3. Develop geometric formula for area or volume.

Course Objectives

Upon satisfactory completion of the course, students will be able to:

1. Solve word problems using the basic concepts of geometry and will identify various geometric patterns.
2. Topics from probability and statistics
3. Demonstrate the basic idea of congruence and similarity and actively develop a number of geometric constructions.
4. Identify and apply a variety of transformations, including translation, rotations, reflections and size change
5. Develop the relationship between two- and three-dimensional shapes.
6. Recognize a variety of geometric figures, and be able to use and apply the formulas in relation to area, perimeter, surface area, and volume.
7. Conversions using non-standard and standard units, including English (U.S. Standard) and Metric units.

Textbooks & Other Resources or Links

Required: Sowder L., Sowder J., Nickerson. S., Whitacre I. 2023. Reconceptualizing Mathematics. 4th W.H. Freeman & Company. ISBN: Printed Text: 9781319303730; E-Text: 9781319483135.

Course Requirements and Instructional Methods

- **Homework:** Homework must be done in a separate notebook and must be kept organized. It is expected that you will complete your homework by the class before an exam and it will be collected and returned on that day. For those of you who wish to use a tablet, you may upload the homework as one pdf to canvas. What is not completed by the class before the exam will not be graded at a later date.
- **Quizzes:** 21 Quizzes will be given daily and completed in groups. The two lowest quiz scores will be dropped. If you stay until the end of class, you may turn the quiz in the following class period. If you leave early, that will be one of your dropped quizzes.
- **Exams:** 4 Exams (15% each exam)
 - Exam 1: Chapters 16, 17
 - Exam 2: Chapters 18, 19, 20
 - Exam 3: Chapter 21, 22, 23
 - Exam 4: Chapter 24, 25, 26
- **Final Exam: Cumulative (Chapters 16 – 26)**
- **There are no make-up exams.** If you should miss an exam, you must provide excused documentation. If you should miss an exam with excused documentation, I will replace your final grade with the final exam score.
- If **anyone** does better on the final, I will replace your lowest test grade with the grade from the final exam.
- It is the students' responsibility to drop the class. If you stop attending, I reserve the right to drop you for excessive absences as state in the college catalog. There is no guarantee I will drop you. Imperial Valley College's (IVC) excessive absence policy dictates that instructors may drop students whose unexcused absences exceed the number of hours the class is scheduled to meet per week.



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Course Grading Based on Course Objectives

Your final grade in this course will be based on your performance across a variety of activities that reflect the full writing process—from brainstorming and research to revision and reflection. Each assignment category contributes a specific percentage to your final grade:

Grading Breakdown

Category	Description	Weight
Homework	Problems are assigned from the textbook	5%
Quizzes	Daily quizzes to be completed in groups	10%
Exams	Four Exams (15% each)	60%
Final Exam	Cumulative	25%

Final Grade Calculation

A: 90% – 100% ; B: 80% - 89% ; C: 70% - 79% ; D: 60% - 69% ; F: Less than 60%

Academic Honesty (Artificial Intelligence -AI)

IVC values critical thinking and communication skills and considers academic integrity essential to learning. Using AI tools as a replacement for your own thinking, writing, or quantitative reasoning goes against both our mission and academic honesty policy and will be considered academic dishonesty, or plagiarism unless you have been instructed to do so by your instructor. In case of any uncertainty regarding the ethical use of AI tools, students are encouraged to reach out to their instructors for clarification.



Accessibility Statement

Imperial Valley College is committed to providing an accessible learning experience for all students, regardless of course modality. Every effort has been made to ensure that this course complies with all state and federal accessibility regulations, including Section 508 of the Rehabilitation Act, the Americans with Disabilities Act (ADA), and Title 5 of the California Code of Regulations. However, if you encounter any content that is not accessible, please contact your instructor or the area dean for assistance. If you have specific accommodations through **DSPS**, contact them for additional assistance.

We are here to support you and ensure that you have equal access to all course materials.

Course Policies

- **Class participation:** Be fully present—mentally and physically. Participation is essential for success. As future teachers, your habits now matter. Arrive on time and ready to learn.
- **Cell phones:** Please do not use your phone during class. It is distracting and takes time away from learning. Be the kind of student you would want in your own classroom.
- **Enjoy learning:** Embrace productive struggle. There is value in not immediately knowing how to solve a problem—work through it with your peers. As a teacher, you won't always have someone to rely on for answers.
- **Consistency:** Learn a little each day rather than trying to learn everything at once. You need time to process and retain the material.
- **Quizzes:** There will be daily quizzes. Two quiz scores will be dropped. Missing an occasional quiz will not significantly affect your grade, but frequent absences will. If you miss a great deal of class, you may need to reconsider your enrollment.
- **Exams:** There will be three exams. Regular studying will prepare you to demonstrate your understanding. Exams will include both multiple-choice and free-response questions.
- **Final exam:** The final exam is an opportunity to demonstrate what you've learned. It will also include multiple-choice and free-response questions.
- **Make-up exams:** There are no make-up exams. If you miss an exam and provide documentation for an excused absence as defined in the catalog, your final exam score may replace your lowest exam score.
- **Final exam replacement option:** If all assignments (homework, quizzes, etc.) are submitted on time and no exams are missed, you may replace your final exam score with your lowest exam score if your final exam score is higher.
- **Restroom policy during exams:** There are no restroom breaks during exams. If you leave the room, your exam will be collected and graded as submitted.



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Out of Class Assignments: The Department of Education policy states that one (1) credit hour is the amount of student work that reasonably approximates not less than one hour of class time and two (2) hours of out-of-class time per week over the span of a semester. WASC has adopted a similar requirement. This means you should plan on 3 hours of class time, plus an additional 6 hours each week for working outside of class. This means you should spend at least 9 hours working on math each week.

Academic Honesty Policy

Don't cheat!

Cheating

Cheating includes any attempt to gain unfair academic advantage. Examples include:

- Sharing or receiving answers during exams. Quizzes – you are encouraged to work together. This does not mean quickly copying the answer from a classmate
- Submitting work you didn't complete yourself
- Using unauthorized materials during an assessment

Violations of academic honesty will result in a zero for the assignment and may be reported to the college for disciplinary review.

We all become better learners by upholding integrity in everything we do.

Attendance Policy

Attend all classes. Please get to know a classmate who can text you notes should you miss class.

Excessive absences may result in dropping you from the course. It is your responsibility to notify me of any challenges or to drop the course if you feel unable to continue. Please refer to the [General Catalog](#) for details on drop and withdrawal deadlines.

Financial Aid

Your Grades Matter! In order to continue to receive financial aid, you must meet the Satisfactory Academic Progress (SAP) requirement. Making SAP means that you are maintaining a 2.0 GPA, you have successfully completed 67% of your coursework, and you will graduate on time. If you do not maintain SAP, you may lose your financial aid. If you have questions, please contact financial aid at finaid@imperial.edu.

IVC Student Resources

IVC wants you to be successful in all aspects of your education. For help, resources, services, and an explanation of policies, visit <http://www.imperial.edu/studentresources> or click the heart icon in Canvas.

Anticipated Class Schedule/Calendar

Date	Sections Covered	Homework	Quizzes
2.17.26	16.1: Polygon Vocabulary	Section 16.1	Quiz #1
2.19.26	16.2: Organizing Shapes	Section 12.2	Quiz #2
2.24.26	16.3: Triangles and Quadrilaterals	Section 16.3	Quiz #3
2.26.26	16.4: Problem Solving Strategies	Section 16.4	Quiz #4
3.03.26	17.1, 17.3: Faces, Nets, Visualize Polyhedra	Section 17.1, 17.3	Quiz #5
3.05.26	17.2: Introduction to Polyhedra	Section 17.2	Quiz #6
3.10.26	17.4, 17.5 Congruent and special Polyhedra	Section 17.4, 17.5	Quiz #7
3.12.26	18.1: Symmetry of shapes and Review		
3.17.26	Exam 1: Chapters 16 and 17		
3.19.26	18.2, 19.1 Symmetry of Shapes; Tessellations	Section 18.1, 18.2	Quiz #8
3.24.26	19.2, 20.1: Tessellations, Dilations of planar figures	Section 19.1, 19.2 Assign project 1	Quiz #9
3.26.26	20.2, 20.3: Similarity and Dilations in planar figures	Section 20.1, 20.2	Quiz #10
3.31.26	20.3: More about similarity	Section 20.1	Quiz #11
4.02.26	21.1, 21.2: Planar Curves and Constructions, Curved Surfaces	Section 20.2, 20.3 Assign project 2	Quiz #12
Spring Break			
4.14.26	Review		
4.16.26	Exam 2: Chapters 18, 19, 20		
4.21.26	22.1, 22.2: Rigid Motion	Section 21.1, 21.2	Quiz #13
4.23.26	22.2, 22.3: Rigid Motion	Section 22.1, 22.2	Quiz #14
4.28.26	22.4, 23.1 Rigid Motion; Conceptualizing and Measuring Length	Section 22.3, 22.4	Quiz #15
4.30.26	23.1, 23.2: Conceptualizing and Measuring length, Key ideas of measurement	Section 23.1	Quiz #16
5.05.26	23.2, 23.3 Conceptualizing and Measuring Angle	Section 23.2, 23.3	Quiz #17
5.07.26	24.1: Area and Surface Area, Review		
5.12.26	Exam 3: Chapters 21, 22, 23		
5.14.26	24.1, 24.2: Area, Surface Area and Volume	Section 24.1	Quiz #18
5.19.26	24.2, 25.1: Volume, Circumference, Area and Surface Area	Section 24.2, 25.1	Quiz #19
5.21.26	25.2, 26.1: Volume, Pythagorean Theorem	Section 25.2	Quiz #20
5.26.26	26.1, 26.2; Pythagorean Theorem, Other kinds of measurement	Section 26.1, 26.2	Quiz #21
5.28.26	Review		
6.02.26	Exam 4: Chapters 24, 25, 26		
6.04.26	Review	Project #1,2 Due	
6.09.26	Final Exam: Cumulative	We will decide as a class which day to do the final, Tuesday or Thursday. I want to be mindful of your other finals and ensure you don't have all your finals on the same day.	
6.11.26	Final Exam: Cumulative		

*****Subject to change without prior notice*****