IMPERIAL VALLEY COLLEGE

Basic Course Information

Semester:	**Spring 2025**	Instructor Name:	**Jill Nelipovich**
Course Title & #:	**Math 112 -**	Email:	**Jill.nelipovich@imperial.edu**
CRN #:	**20062 – Geometry in Elementary Math**	Webpage (optional):	**CANVAS**
Classroom:	**2728**	Office #:	**2760**
Class Dates:	**02/10/25 – 06/06/25**	Student Hours:	**M/W: 1:00 – 1:30 p.m.** **T/ TR: 9:00 – 9:30 a.m.** **T: 11:20 – 12:50 p.m.** ****And by appt.**
Class Days:	**TR**	Office Phone #:	**760-355-6297**
Class Times:	9:40 – 11:05	Emergency Contact:	**Silvia Murray** **760-355-6201**
Units:	3	Class Format/Modality:	Face-to-face

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.

Textbooks & Other Resources or Links

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

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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.

Course Requirements and Instructional Methods

1. Class participation: Be present in mind, body and spirit! You need to participate to succeed. You are our future teachers. Missing class is not indicative of an educator. Be on time and ready to learn.
2. Do not spend time on your cell phone. It's simply rude. Time on your cell phone is time away from learning. Be the student you want your students to be!
3. Love to learn! Embrace the productive struggle. Take joy in not knowing how to solve a problem and work it out with your peers. When you are teaching one day, you will not have "the friend" in your back pocket.
4. Learn a little every day and refrain from learning a lot in one day. You need time to digest the material.
5. Quizzes: There will be a daily quiz. I will drop two quizzes. If you miss a quiz, it will not effect your score. If you miss a lot of class, then you should probably reconsider taking the class. There will be greater issues than missing a few quiz points.
6. Exams – Three exams! Study a little bit every day and embrace the opportunity to share your knowledge with me. The exams will consist of multiple choice and free response.
7. Final Exam – you get to share with me what you learned! Again, the exam will consist of multiple choice and free response.
8. There are no Make-up tests. If you miss an exam and can produce an excused absence as defined by the catalog, I will replace the lowest score with the final exam score.
9. If you turn in all of your assignments: Homework, quizzes, etcetera, on time and you do not miss any exams, you may replace the final exam score with your lowest score, provided your final score is higher.
10. There are no restroom breaks on exams. If you use the restroom, your exam will be turned in and that will be your grade.

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Course Grading Based on Course Objectives

Quizzes: In class and on Canvas……..10%

Exams: (Three)……60%

Projects…….5%

Final Exam…….25%

A: 90% - 100%

B: 80% - 89.9%

C: 70: - 79.9%

D: 60% - 69.9%

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.

Cheating

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.

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Course Policies

1. Form study groups.
2. Become a family.
3. Don’t cheat.
4. Cell phones are only allowed for taking pictures of the work on the board.
5. No Restroom breaks during the exams. .

Financial Aid

Your Grades Matter! In order to continue to receive financial aid, you must meet the Satisfactory Academic Progress (SAP) requirement. Makings 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.

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Anticipated Class Schedule/Calendar

Date or Week	Activity, Assignment, and/or Topic
2/10/25	Introduction, Chapter 16.1: Polygon Vocabulary
2/12/25	Chapter 16.2: Organizing Shapes
2/17/25	Chapter 16.3: Triangles and Quadrilaterals
2/19/25	Chapter 16.4: Problem Solving Strategies
2/24/25	Chapter 17.1, 17.3: Faces and Nets; Represent and Visualize Polyhedra
2/26/25	Chapter 17.2: Introduction to Polyhedra
3/03/25	Chapter 17.4, 17.5: Congruent Polyhedra, Special Polyhedra
3/05/25	Chapter 18.1, 18.2: Symmetry of shapes: Planes and polyhedra
3/10/25	Chapter 19.1, 19.2: Tessellations: Planes and Space
3/12/25	Review
3/17/25	Exam 1
3/19/25	Chapter 20.1: Similarity and Dilations in Planar Figures
3/24/25	Chapter 20.1: Similarity and Dilations in planar figures
3/26/25	Chapter 20.2, 20.3: More about similar figures, Similarity in 3D figures
3/31/25	Chapter 21.1: Planar Curves and Constructions
4/02/25	Chapter 21.2, 22.1: Curved Surfaces, Rigid motion
4/07/25	Chapter 22.2, 22.3: Rigid Motion
4/09/25	Chapter 22.4: Rigid Motion Chapter 23.1Conceptionalizing and Measuring Length
4/14/25	Review
4/16/25	Exam 2
4/21/25	Spring Recess
4/23/25	Spring Recess
4/28/25	Chapter 23.2: Key Ideas of Measurement
4/30/25	Chapter 23.3, 23.4: Conceptualizing and Measuring Angle
5/05/25	Chapter 24.1: Area and Surface Area
5/07/25	Chapter 24.2: Volume
5/12/25	Chapter 25.1: Circumference, Area and Surface Area Formulas
5/14/25	Chapter 25.2: Volume Formulas
5/19/25	Chapter 26.1: The Pythagorean Theorem
5/21/25	Chapter 26.2: Other Kinds of Measurements
5/26/25	Review
5/28/25	Exam 3
6/02/25	
6/04/25	Final Exam

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

Updated 11/2024