

Basic Course Information				
Semester:	Spring 2025	Instructor Name:	Zhong Hu	
Course Title & #:	Math 112	Email:	Zhong.hu@imperial.edu	
CRN #:	20051	Webpage (optional):		
Classroom:	2721	Office #:	2760.1	
			MW: 1 pm to 2:15 pm (in zoom) TR: 9:25 am to 10:10 am (In	
Class Dates:	2/10/25 – 6/6/25	Office Hours:	my office 2760.1)	
Class Days:	W	Office Phone #:	760-355-6355	
Class Times:	6:30 pm to 9:40 pm	Emergency Contact:	Email me	
Units:	3	Class Format/Modality:	In Person on Campus	

### **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.

Updated 6/2023



Conversions using non-standard and standard units, including English (U.S. Standard) and Metric units

#### **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.

## **Course Requirements and Instructional Methods**

# **Homework**

Homework will be assigned at each class meeting. They should be on stapled arranged in the correct order. Please write your name and section number on the top right corner. It is your responsibility to check the homework assignment even if you are absent.

#### Homework will be due by the date of each test.

# Quiz/Pop-quiz/Group Work

A quiz or group work may be given at any time during any class period. It may not be announced. The number of quizzes or group work in the semester will be instructor's discretion. One of the lowest scores will be dropped.

### <u>Tests</u>

There will be three tests. Most of the questions on these tests will require showing a significant amount of work. A correct answer with insufficient work will receive partial credit or no credit.

# **Final Exam**

At the end of the semester, a COMPREHENSIVE/CUMULATIVE Final Exam will be given. If you miss the final, it will be recorded as a zero.

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.

se Grading Based on Course Objectives		
Grading Policy		
(Pop) Quiz /Group Work	10%	
Homework	10%	
Tests	60%	
Final Exam	20%	
Total	100%	
Grading Scale for determinin	<u>g the final grade</u>	
A: 90%-100%		
B: 80%-89%		
C: 70%-79%		
D: 60%-69%		



## 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.

### **Course Policies**

Attendance and drop Policy You must attend the first day of class or you will be dropped from the course as a 'No Show.' Should readmission be desired, the student's status will be the same as that of any other student who desires to add a class. Regular attendance in all classes is expected of all students. A student whose continuous, unexcused absences exceed the number of hours the class is scheduled to meet per week may be dropped. It is the student's responsibility to drop or officially withdraw from the class

### **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**

WEEK	TOPIC
1	Course Syllabus 16.1
2	16.2, 16.3, 16.4
3	17.1, 17.2, 17.3
4	17.4, 17.5
5	Review, Test 1
6	18.1, 18.2
7	19.1, 19.2, 20.1
8	20.2, 20.3
9	21.1, 21.2
10	Review, Test 2
11	No Class
12	22.1, 22.2, 22.3
13	22.4, 23.1, 23.2
14	23.3, 23.4, 24.1
15	24.2, 25.1, 25.2, 26.1
16	Test 3
17	Final Exam

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