

Basic Course Information

Semester:	Spring 2017	Class Dates:	2/13/17 - 6/9/17
Course Title & #:	Math 112	Instructor Name:	Jill Kitzmiller
CRN #:	20116	Email:	Jill.kitzmiller@imperial.edu
Units:	3	Office #:	2768
Classroom:	2721	Office Hours:	7:30 - 8, 11:10 - 12:10 T/Th 1:30 - 2 MW
Class Days:	W	Office Phone #:	760 - 355 - 6296
Class Times:	6:30 - 9:40 pm	Emergency Contact:	Ofelia Duarte – Staff Sec II 760 - 355 - 6155

Contacting the Instructor

I will be available during office hours for personal discussion. I endeavor to listen to voice-mail and look at email each day when I am on campus. I DO NOT look at email on the weekends (Friday- Sunday) or on holidays. I do not respond to email regarding absences, unless it is long term. I do not discuss grades over email; this must be done in person.

Course Description

Recommended for students who are working towards a teaching credential in elementary education. Topics discussed are decimals and percent, geometry, geometric constructions, rotations, translations, measurements and problem solving. **Prerequisite:** MATH 091 or MATH 090 with a grade of "C" or better.

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 (ISLO1, ISLO2, ISLO3).
2. Determine the relationship between similar figures (ISLO1, ISLO2, ISLO3).
3. Develop geometric formula for area or volume (ISLO1, ISLO2, ISLO3).

Course Objectives

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

1. Recognize two and three dimensional geometry, and solve a number of applications.
2. Demonstrate the basic idea of congruence and similarity and actively develop a number of geometric constructions.
3. Identify and apply different kinds of transformations, and various types of symmetries.
4. Recognize a variety of geometric figures, and be able to use and apply formulae in both geometric and non-geometric context.

5. Graph using the Cartesian system of coordinates and will recognize the relationship that exists between algebra and geometry.
6. Solve word problems using the basic concepts of geometry and will identify various geometric patterns.
7. Demonstrate knowledge of statistics and probability.

Textbooks & Other Resources or Links

Reconceptualizing Mathematics (any edition); Sowder. Freeman ISBN-13: 978-1-4641-0898-3 . Also needed is the worksheet packet available in bookstore (or you can print your own copies from materials online). Additional supplies needed: scientific calculator, straightedge (ruler), scissors, and tracing paper.

Pace of Course and Tips for Success

The textbook for this class is designed for learning through discussions and activities and generally does not give examples to follow. Some of the important material is given in homework problem format, not as material to read. It will be difficult to understand the material if you do not attend all the class meetings.

Prior to taking this course you are expected to know the names and characteristics of basic geometric 2 and 3 dimensional shapes and be familiar with and able to use area, surface area and volume formulas.

Avoid falling behind in the material, reading and homework. If you fall behind it will be difficult to catch up. You cannot learn mathematics without doing the problems. Stay organized, take good notes and read your notes after class. If you are having difficulty with the material, get help. You can get help from me during office hours or in the Math Lab or Library Services Study Skills Center. Work with others outside of class, form a study group if possible. You are responsible for all material in assigned chapters and all material covered in lecture, even if you are absent, so find someone in class to make you copies of the notes & materials if you cannot be in class.

Course Requirements and Instructional Methods

Classroom instruction will consist of a combination of lecture and exploratory activities designed for student led learning. You will be required to participate in class discussions, group work and presenting work to the class. Failure to participate in class activities/discussions can result in lowering of your grade. Problems done for homework and during class are designed to help you understand concepts and learn to communicate mathematically. Group work and assignments during class are mandatory and are not to be considered social time, texting/cell check or break time.

There will be homework assigned for each of the 11 mandatory chapters. Homework answers or outlines are posted on line. Since answers are available, homework points will be awarded on the basis of completeness and quality of work, minimal quality (including just copying down answers) will receive minimal points. Homework will be a maximum of 10 points each chapter regardless of length of assignment. I will deduct 2 points for every class meeting that the homework assignment is late. Any homework turned in 5 or more classes late will receive 0 points. There will be two projects assigned that will supplement homework for a chapter. These are each worth 20 points and must be quality work. There may also be extra credit worksheets that will be assigned. Any extra assignments or points earned over 140 will count as extra credit. (140 points)

There will be 12 quizzes that are open note and based on homework. Some will be in class, some may be take-home due the next class meeting. Some may also be done in groups. There are no make-up quizzes. Any missing quiz grade will be recorded as a 0. Your lowest 2 quiz grades will be used as extra credit. Quizzes will be 10 points each. (100 points)

There will be 3 in class exams and one final exam that are closed book and closed note. Students must work independently. Plan now to be in class on the date of the exams. No make-up exams will be given unless arranged in advance with supporting documentation. Any missing exam grade will be recorded a 0. Exams will be 100 points each. (400 points)

I DO NOT give make up assignments. You must complete the work and turn it in on time.

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.

Course Grading Based on Course Objectives

Points earned in the course will be based on the following items. Points are approximate and may be modified according to extra or deleted assignments.

Homework & projects:	140 points
Quizzes	100 points
3 Exams	300 points
<u>Final exam</u>	<u>100 points</u>
Total points	640 points

Your grade will be based on the following points and percentages:

576 or more points (90 – 100%)	= A
512 – 575 points (80 – 89%)	= B
448 – 511 points (70 – 79%)	= C
384 – 447 points (60 – 69%)	= D
Below 384 points	= F

Attendance, class participation and a subjective instructor's interpretation of work may be used in assigning a final grade to borderline cases.

Incomplete Grade

To receive a final grade of incomplete, you must be passing the class and be unable to take the final exam.

Attendance

- A student who fails to attend the first meeting of a class or does not complete the first mandatory activity of an online class will be dropped by the instructor as of the first official meeting of that class. Should readmission be desired, the student's status will be the same as that of any other student who desires to add a class. It is the student's responsibility to drop or officially withdraw from the class. See [General Catalog](#) for details.
- 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. For online courses, students who fail to complete required activities for two consecutive weeks may be considered to have excessive absences and may be dropped.
- Absences attributed to the representation of the college at officially approved events (conferences, contests, and field trips) will be counted as 'excused' absences.

Classroom Etiquette

- Electronic Devices: Cell phones and electronic devices must be turned off and put away during class, unless otherwise directed by the instructor.
- Food and Drink are prohibited in all classrooms. Water bottles with lids/caps are the only exception. Additional restrictions will apply in labs. Please comply as directed by the instructor.
- Disruptive Students: Students who disrupt or interfere with a class may be sent out of the room and told to meet with the Campus Disciplinary Officer before returning to continue with coursework. Disciplinary procedures will be followed as outlined in the [General Catalog](#).
- Children in the classroom: Due to college rules and state laws, no one who is not enrolled in the class may attend, including children.

Online Netiquette

- What is netiquette? Netiquette is internet manners, online etiquette, and digital etiquette all rolled into one word. Basically, netiquette is a set of rules for behaving properly online.
- Students are to comply with the following rules of netiquette: (1) identify yourself, (2) include a subject line, (3) avoid sarcasm, (4) respect others' opinions and privacy, (5) acknowledge and return messages promptly, (6) copy with caution, (7) do not spam or junk mail, (8) be concise, (9) use appropriate language, (10) use appropriate emoticons (emotional icons) to help convey meaning, and (11) use appropriate intensifiers to help convey meaning [do not use ALL CAPS or multiple exclamation marks (!!!!)].

Disabled Student Programs and Services (DSPS)

Any student with a documented disability who may need educational accommodations should notify the instructor or the [Disabled Student Programs and Services](#) (DSP&S) office as soon as possible. The DSP&S office is located in Building 2100, telephone 760-355-6313. Please contact them if you feel you need to be evaluated for educational accommodations.

Academic Honesty

Academic honesty in the advancement of knowledge requires that all students and instructors respect the integrity of one another's work and recognize the important of acknowledging and safeguarding intellectual property.

There are many different forms of academic dishonesty. The following kinds of honesty violations and their definitions are not meant to be exhaustive. Rather, they are intended to serve as examples of unacceptable academic conduct.

- **Plagiarism** is taking and presenting as one's own the writings or ideas of others, without citing the source. You should understand the concept of plagiarism and keep it in mind when taking exams and preparing written materials. If you do not understand how to "cite a source" correctly, you must ask for help.
- **Cheating** is defined as fraud, deceit, or dishonesty in an academic assignment, or using or attempting to use materials, or assisting others in using materials that are prohibited or inappropriate in the context of the academic assignment in question.

Anyone caught cheating or plagiarizing will receive a zero (0) on the exam or assignment, and the instructor may report the incident to the Campus Disciplinary Officer, who may place related documentation in a file. Repeated acts of cheating may result in an F in the course and/or disciplinary action. Please refer to the [General Catalog](#) for more information on academic dishonesty or other misconduct. Acts of cheating include, but are not limited to, the following: (a) plagiarism; (b) copying or attempting to copy from others during an examination or on an assignment; (c) communicating test information with another person during an examination; (d) allowing others to do an assignment or portion of an assignment; (e) using a commercial term paper service.

Additional Student Services

Imperial Valley College offers various services in support of student success. The following are some of the services available for students. Please speak to your instructor about additional services which may be available.

- **Blackboard Support Site.** The Blackboard Support Site provides a variety of support channels available to students 24 hours per day.
- **Learning Services.** There are several learning labs on campus to assist students through the use of computers and tutors. Please consult your [Campus Map](#) for the [Math Lab](#); [Reading, Writing & Language Labs](#); and the [Study Skills Center](#).
- **Library Services.** There is more to our library than just books. You have access to tutors in the [Study Skills Center](#), study rooms for small groups, and online access to a wealth of resources.

Student Counseling and Health Services

Students have counseling and health services available, provided by the pre-paid Student Health Fee.

- **[Student Health Center](#)**. A Student Health Nurse is available on campus. In addition, Pioneers Memorial Healthcare District provide basic health services for students, such as first aid and care for minor illnesses. Contact the IVC [Student Health Center](#) at 760-355-6128 in Room 1536 for more information.
- **[Mental Health Counseling Services](#)**. Short-term individual, couples, family, and group therapy are provided to currently enrolled students. Contact the IVC [Mental Health Counseling Services](#) at 760-355-6196 in Room 2109 for more information.

Student Rights and Responsibilities

Students have the right to experience a positive learning environment and to due process of law. For more information regarding student rights and responsibilities, please refer to the IVC [General Catalog](#).

Information Literacy

Imperial Valley College is dedicated to helping students skillfully discover, evaluate, and use information from all sources. The IVC [Library Department](#) provides numerous [Information Literacy Tutorials](#) to assist students in this endeavor.

Anticipated Class Schedule/Calendar

*****Tentative, subject to change without prior notice*****

Monday	Tuesday	Wednesday	Thursday
2/13	2/14	2/15 Introduction 16.1, 16.2, 16.3	2/16
2/20 HOLIDAY	2/21	2/22 Bring polyhedra 17.1, , 17.2, 17.6	2/23
2/27	2/28	3/1 17.3, 17.4, 17.5	3/2
3/6	3/7	3/8 Bring ruler and scissors 18.1, 18.2, 19.1, 19.2 Tessellation project assign, Chapter 16 &17 HW due	3/9
3/13	3/14	3/15 Bring ruler 20.1, 20.2, Review	3/16
3/20	3/21	3/22 Exam 1, Chapter 18,19 HW due	3/23
3/27	3/28	3/29 Bring compass, ruler 20.3, 21.1, 21.2, Compass project assign Tessellation project due	3/30
4/3	4/4	4/5 13 Bring tracing paper 22.1, 22.2, 22.3, Chapter 20,21 HW due	4/6
4/10	4/11	4/12 23.1, 23.2, Compass project due	4/13
4/17 HOLIDAY	4/18 HOLIDAY	4/19 HOLIDAY	4/20 HOLIDAY
4/24	4/25	4/26 24.1, 24.2, Review	4/27
5/1	5/2	5/3 Exam 2, Chapter 22, 23 HW due	5/4
5/8	5/9	5/10 25.1, 25.2	5/11
5/15	5/16	5/17 26.1, 26.2, Review	5/18
5/22	5/23	5/24 Exam 3, Chapter 24, 25, 26 HW due	5/25
5/29 HOLIDAY	5/30	5/31 Excerpts from chapters 27 – 30, Review for final	6/1
6/5	6/6	6/7 FINAL, Probability & Stats HW due	6/8

HOMEWORK LIST – MATH 112

LEARNING EXERCISES FROM TEXTBOOK

Chapter 16

16.1 : 1, 2, 3, 6, 9 – 11, 13, 14, 16

16.2 : 1 – 4

16.3 : 1, 2, 5, 6, 7

Chapter 17

17.1 : 1 – 6

17.2 : 3, 6, 7

17.3 : 3 – 5, 7, 16, 17

17.4 : 1, 2, 4, 7

17.5 : 1

Chapter 18

18.1 : 1, 4 – 8, 10

18.2 : 1, 5 – 9

Chapter 19

19.1 : 1, 2, 8

19.2 : 2, 3

Chapter 20

20.1 : 2, 4, 6, 8, 9, 15

20.2 : 1, 3, 4, 5

20.3 : 3, 4, 5, 7, 14, 17

Chapter 21

21.1 : 1 – 6

21.2 : 1 – 7

Chapter 22

22.1 : 1 – 3 (4 on worksheet)

22.2 : worksheet for 4, 5, 6

22.3 : 2, 3

22.4 : worksheet

Chapter 23

23.1: 5, 6, 8, 9, 10, 12, 16, 17, 22

23.2: 2, 12, 14, 16, 22, 24, 35, 41

Chapter 24

24.1: 5, 6, 9, 12 f-g

24.2: 1, 2, 6, 8, 9, 10, 14

Chapter 25

25.1: 3, 5, 8, 9, 18i, 23, 25, 29

25.2: 1, 5, 8, 18a, b

Chapter 26

26.1: 1, 2, 3, 4, 13, 18, 19

Chapter 27 – 30

Worksheets given in class