

Basic Course Information

Semester:	Spring 2018	Instructor Name:	Jill Kitzmiller
Course Title & #:	Math 112	Email:	jill.kitzmiller@imperial.edu
CRN #:	20116	Office:	2768
Classroom:	2721	Office Hours:	MW 11:05 – 12:10
Class Dates:	2/12/2018 – 6/7/2018		TTH 9:25 – 10:20
Class Days:	W	Office Phone #:	760-355-6296
Class Times:	6:30 – 9:40 pm	Emergency Contact:	Ofelia Duarte – Staff Sec II
Units:	3		760-355-6155

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. (CSU) (UC credit limited. See a counselor)

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.

Course Prerequisite(s) and/or Co-requisite(s)

MATH 091 or MATH 090 with a minimum 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. Geometric construction by hand and use of technology (ILO3, ILO4)
2. Written mathematical communication skills (ILO1, ILO4)
3. Transformation and tessellation projects (ILO3, ILO4)

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 contexts.
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 a 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 on Canvas). Additional supplies needed: scientific calculator, straightedge (ruler), scissors, and tracing paper.

Contacting 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 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.

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.

You cannot learn all of the material by just showing up to class. Math is a skill that you can become good at by practicing it. It is critical that you read the material, do the homework and ask questions. Homework helps you asses your own problem areas. It also what makes the material “stick in your head”. It is an extremely bad idea to wait until the weekend to start your homework. You will not be able to remember everything done in class. One of the best things you can do is reserve a time slot every day devoted to working on math.

Avoid falling behind in the material, reading and homework. If you fall behind it will be difficult to catch up. 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.

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

HOMEWORK AND PROJECTS: There will be homework assigned for each of the 11 mandatory chapters. **It will be difficult to pass the class if you do not complete any homework!** 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 must be written neatly and each section must be clearly indicated. Homework will be a maximum of 10 points each chapter regardless of length of assignment. I will deduct 2 points for unstapled work and 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. 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. There is NO MAKE-UP for these handouts. If you are absent or leave class for any reason, then you will miss the opportunity to turn in the assignment. (140 points)

QUIZZES: There will be 18 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 or late quizzes accepted. You may turn in a take home quiz **ahead of class** at my office or online. If you are absent for any reason you will miss the opportunity to turn in the quiz. 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. (160 points)

EXAMS: 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 150 points each. **Note: The final exam is cumulative and mandatory for all students.** (450 + 150 points)

I DO NOT give make up assignments. You must complete the work and turn it in on time.
Note: The final exam is cumulative and mandatory for all students.

To receive a passing grade of “C” or better, you must have 630 (70%) points or more based on:

Homework and projects	140 points
Quiz	160 points
Exams	450 points
<u>Final</u>	<u>150 points</u>
Total	900 points

Breakdown: 810 (90%) & up = A, 720 – 809 (80 - 89%) = B, 630 – 719 (70 - 79%) = C, 540 - 629 (60 - 69%) = D, below 540 (59% or less) = 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.

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.

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.

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.

- **CANVAS LMS.** Canvas is Imperial Valley College's main Learning Management System. To log onto Canvas, use this link: [Canvas Student Login](#). The [Canvas Student Guides Site](#) provides a variety of support available to students 24 hours per day. Additionally, a 24/7 Canvas Support Hotline is available for students to use: 877-893-9853.
- **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 counseling services are available for currently enrolled students. Services are provided in a confidential, supportive, and culturally sensitive environment. Please contact the IVC Mental Health Counseling Services at 760-355-6310 or in the building 1536 for appointments or more information..

Veteran's Center

The mission of the [IVC Military and Veteran Success Center](#) is to provide a holistic approach to serving military/veteran students on three key areas: 1) Academics, 2) Health and Wellness, and 3) Camaraderie; to serve as a central hub that connects military/veteran students, as well as their families, to campus and community resources. Their goal is to ensure a seamless transition from military to civilian life. The Center is located in Building 600 (Office 624), telephone 760-355-6141.

Extended Opportunity Program and Services (EOPS)

The Extended Opportunity Program and Services (EOPS) offers services such as priority registration, personal/academic counseling, tutoring, book vouchers, and community referrals to qualifying low-income students. EOPS is composed of a group of professionals ready to assist you with the resolution of both academic and personal issues. Our staff is set up to understand the problems of our culturally diverse population and strives to meet student needs that are as diverse as our student population.

Also under the umbrella of EOPS our CARE (Cooperative Agency Resources for Education) Program for single parents is specifically designed to provide support services and assist with the resolution of issues that are particular to this population. Students that are single parents receiving TANF/Cash Aid assistance may qualify for our CARE program, for additional information on CARE please contact Lourdes Mercado, 760-355- 6448, lourdes.mercado@imperial.edu.

EOPS provides additional support and services that may identify with one of the following experiences:

- Current and former foster youth students that were in the foster care system at any point in their lives
- Students experiencing homelessness
- Formerly incarcerated students

To apply for EOPS and for additional information on EOPS services, please contact Alexis Ayala, 760-355-5713, alexis.ayala@imperial.edu.

Student Equity Program

- The Student Equity Program strives to improve Imperial Valley College's success outcomes, particularly for students who have been historically underrepresented and underserved. The college identifies strategies to monitor and address equity issues, making efforts to mitigate any disproportionate impact on student success and achievement. Our institutional data provides insight surrounding student populations who historically, are not fully represented. Student Equity addresses disparities and/or disproportionate impact in student success across disaggregated student equity groups including gender, ethnicity, disability status, financial need, Veterans, foster youth, homelessness, and formerly incarcerated students. The Student Equity Program provides direct supportive services to empower students experiencing insecurities related to food, housing, transportation, textbooks, and shower access. We recognize that students who struggle meeting their basic needs are also at an academic and economic disadvantage, creating barriers to academic success and wellness. We strive to remove barriers that affect IVC

students' access to education, degree and certificate completion, successful completion of developmental math and English courses, and the ability to transfer to a university. Contact: 760.355.5736 or 760.355.5733 Building 100.

- The Student Equity Program also houses IVC's Homeless Liaison, who provides direct services, campus, and community referrals to students experiencing homelessness as defined by the McKinney-Vento Act. Contact: 760.355.5736 Building 100.

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

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

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

HOMEWORK LIST – MATH 112

LEARNING EXERCISES FROM TEXTBOOK (2nd edition)

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