Basic Course Information

Semester:	**Fall 2019**	Instructor Name:	**Jill Kitzmiller**
Course Title & #:	**Math 110 – Number systems in Elementary Math**	Email:	**Jill.kitzmiller@imperial.edu**
CRN #:	**10114**	Webpage (optional):	
Classroom:	**2723**	Office #:	**2768**
Class Dates:	**8/19/19 – 12/14/19**	Office Hours:	**10:40 – 11:10 am MW 9:10 – 9:40, 12:30 – 1, 3:40 – 4:10 pm T Th**
Class Days:	**M/ W**	Office Phone #:	**760-355-6296**
Class Times:	**8:00 - 9:25 am**	Emergency Contact:	**Sylvia Murray – Staff Sec**
Units:	**3**		**760-355-6201**

Contacting the Instructor

I will be available before and after class in my office for personal discussion. I endeavor to listen to voice-mail and look at email each day when I am on campus, but spend most of my time in the classroom. 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

This course focuses on the development of quantitative reasoning skills through in-depth, integrated explorations of topics in mathematics, including real number systems and subsystems. Emphasis is on comprehension and analysis of mathematical concepts and applications of logical reasoning. (CSU) (UC credit limited. See a counselor)

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 knowledge of operations and properties by creating story problems (ILO1, ILO2, ILO3)
2. Demonstrate knowledge of operations by modeling the solutions (ILO1, ILO2, ILO3).
3. Demonstrate an understanding of place value by counting in bases other than ten (ILO1, ILO2, ILO3).

Course Objectives

Upon satisfactory completion of the course, students will be able to:
 1. Analyze mathematical patterns and will solve problems with the calculator as a supporting tool.
 2. Demonstrate an understanding and comprehension of topics dealing with sets, functions and numeration.
 3. Demonstrate an understanding and a working knowledge of whole numbers with emphasis placed on various bases.
 4. Demonstrate an understanding and comprehension of elementary concepts of integer arithmetic.
 5. Analyze basic number theory.
 6. Demonstrate an understanding and comprehension of elementary concepts of fractional numbers, and the use of decimals and exponents.
 7. Demonstrate knowledge of ratios and proportions.

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

Appropriate placement as defined by AB705 or MATH 091 or 098 or 090 with a minimum grade of C or better.

Textbooks & Other Resources or Links

Reconceptualizing Mathematics 3rd edition; Sowder. Freeman ISBN-13: 978-1-4641-9333-0 . A scientific calculator (non-graphing) is useful but not allowed on exams. Worksheets done in class each day are posted on Canvas or available pre-printed for purchase in the bookstore.

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 be able to perform basic calculations with whole numbers, decimals, fractions and percent without the use of a calculator.

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. Some of the exploratory activities are in the text book, some of them are worksheets students are expected to bring to class. 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.

There will be homework assigned for each of the 9 mandatory chapters. 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 may also be other assignments including extra credit assignments offered. Any extra assignments or points earned over 100 will count as extra credit. (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 150 points each. (600 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:	100 points
3 Exams	450 points
Final exam	150 points
Total points	700 points

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

630more points (90 – 100%) = A
560 – 629 points (80 – 89%) = B
490 – 559 points (70 – 79%) = C
420 – 489 points (60 – 69%) = D
Below 420 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.

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.

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.

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.

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 (!!!!)].

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.

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.

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.

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.

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.

Anticipated Class Schedule/Calendar

** Tentative – subject to change

Monday	Tuesday	Wednesday	Thursday
8/19 Introduction / Pretest	8/20	8/21 11.1 / 11.2	8/22
8/26 11.2 / 11.3	8/27	8/28 11.4 / 2.1	8/29
9/2 Holiday	9/3	9/4 2.2 / base 10 blocks Chapter 11 HW due	9/5
9/9 2.3	9/10	9/11 2.3	9/12
9/16 2.4 / base 5 blocks	9/17	9/18 3.1 vocabulary / Review	9/19
9/23 **Exam 1** Chapter 2 HW due	9/24	9/25 3.1 / 3.2	9/26
9/30 3.3 / 3.4	10/1	10/2 3.5 / 4.1	10/3
10/7 5.1	10/8	10/9 5.2 Chapter 3 HW due	10/10
10/14 5.3	10/15	10/16 5.4 / Review	10/17
10/21 **Exam 2** Chapter 4 – 5 HW due	10/22	10/23 6.1 / 6.2	10/24
10/28 6.2 / 6.3	10/29	10/30 6.4	10/31
11/4 6.4	11/5	11/6 7.1 / Pattern blocks	11/7
11/11 Holiday	11/12	11/13 7.2 / 7.3	11/14
11/18 8.1 / Review	11/19	11/20 **Exam 3** Chapter 6 – 7 HW due	11/21
11/25 Holiday	11/26 Holiday	11/27 Holiday	11/28 Holiday
12/2 8.2 / 8.3	12/3	12/4 9.1 / 9.2	12/5
12/9 Final Review	12/10	12/11 **Final** Chapter 8 – 9 HW due	12/12

HOMEWORK RUBRIC – Reconceptualizing Mathematics 3rd Edition

Homework is stapled. Homework is neatly written. Sections are clearly identified.	Homework is stapled. Work is messy or crowded together. Sections are identified but some not clearly	Homework is not stapled. Work is messy or hard to read. Sections are hard to identify	0 – 2 points
All problems are finished	Most problems are finished	Many problems not completed	0 – 4 points
All necessary work is shown. Explanations are clear and written using complete sentences	Most work is shown; some problems have answers without work. Explanations are not complete.	No work shown, only answers. Explanations are copied or not complete.	0 – 4 points

All problems are from **Learning Exercises** unless otherwise noted.

Chapter 2 2.1: 5-7 2.2: 1, 6, 7, 8 2.3: 2 – 6, 14, 18 2.4: 2 (include drawings), 4, 5 **Chapter 3** 3.1: 1 – 3, 6 3.2: 2, 5, 7 3.3: 1 – 4, 6, 8, 14, 17, 18, 22 3.4: 1 – 4, 8 **Chapter 4** 4.1: 1 – 5, Student Errors worksheet **Chapter 5** 5.1: 2 – 5, mental math methods and percent sense worksheets 5.2: 2, 3, 6, 7, 8 5.3: 1 – 3 5.4: Why wouldn't ghost cross road worksheet with work in scientific notation **Chapter 6** 6.1: 2, 3, 4, 8, 10a, 11, 13, 14, 15, 18, 19 6.2: 3 – 6, 8 – 10, 12 6.3: 2, 5, 6, 11, 12 6.4: 1 – 5, 9, 10	**Chapter 7** 7.1: 1 – 3, 14, 15 7.2: 3, 5, 8, 9, 10, 12 7.3: 1 – 3, 7, 13, 14, Pattern block worksheet with all steps shown **Chapter 8** 8.1: 1 – 3 Worksheet (in class) 8.2: 4 – 6 (in class), ratio / fraction problem worksheet **Chapter 9** 9.1: Class discussion only 9.2: 1, 2, 5, 9, 12, 14, 21, ratio comparison worksheet 9.3: Percent Worksheet **Chapter 10 – (Extra Credit)** 10.1: 1, 3 10.2: 1, 2 10.4: 2, 5, 9 10.5: 1 – 5 Worksheets - all **Chapter 11** 11.1: 1, 2, 7, 9, 10, 11, 14, 15, 20 11.2: 3 – 8, 13, 14 11.3: 1, 4, 11, 16, 18 11.4: 4, 5 (a-d), 6 (a-d), 7, 8, 12, 20, 21 Number Theory Worksheet