### **Basic Course Information**

| Semester:         | Spring 2017    | Class Dates:       | 2/13/17 - 6/9/17             |
|-------------------|----------------|--------------------|------------------------------|
| Course Title & #: | Math 110       | Instructor Name:   | Jill Kitzmiller              |
| CRN #:            | 20114          | Email:             | Jill.kitzmiller@imperial.edu |
| Units:            | 3              | Office #:          | 2768                         |
|                   |                |                    | 7:30 - 8, 11:10 - 12:10 T/Th |
| Classroom:        | 2735           | Office Hours:      | 1:30 - 2 MW                  |
| Class Days:       | MW             | Office Phone #:    | 760 - 355 - 6296             |
|                   |                |                    | Ofelia Duarte – Staff Sec II |
| Class Times:      | 2:00 – 3:25 pm | Emergency Contact: | 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 sets and relations, development of the number system from the natural numbers including whole, rational and real numbers, number theory, ratio and proportion. **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 knowledge of operations and properties by creating story problems
- 2. Demonstrate knowledge of operations by modeling the solutions
- 3. Demonstrate an understanding of place value by counting in bases other than ten

# **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.

### **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 posted online). A scientific calculator is useful, but not allowed on Exams.

### **Pace of Course and Tips for Success**

This course covers topics in elementary mathematics and moves rapidly. You are expected to be proficient in operations with whole numbers, fractions, decimals and percent before starting the class. 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 should expect to spend at least 2 – 4 hours on homework after every class meeting. You cannot learn all of the material by just showing up to class. It is critical that you read the material, do the learning exercises, and ask questions. 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 9 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 also be several extra worksheets that will be assigned. Any points earned over 100 will count as extra credit. (100 points)

There will be 14 - 16 quizzes that are open note and based on homework. Some will be during class; some may be take-home due the next class meeting. You are encouraged to work in groups. There are no make-up quizzes. Any missing quiz grade will be recorded as a 0. Your best 12 quiz grades will be used as your grade. Any other quizzes taken will be used as extra credit. Quizzes will be 10 points each. (120 points)

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

There will be 3 in class exams and one final exam that are closed book and closed note. Exams cover material from the quizzes, homework and class work. 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)

<u>Out of Class Assignments</u>: 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 <u>and</u> 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:    | 100 points |
|--------------|------------|
| Quizzes      | 120 points |
| 3 Exams      | 300 points |
| Final exam   | 100 points |
| Total points | 620 points |

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

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558 or more points (90 – 100%) = A
496 – 557 points (80 – 89%) = B
434 – 495 points (70 – 79%) = C
372 – 433 points (60 – 69%) = D
Below 372 points = F
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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**

- <u>Electronic Devices</u>: Cell phones and electronic devices must be turned off and put away during class, unless otherwise directed by the instructor.
- <u>Food and Drink</u> 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.
- <u>Disruptive Students:</u> 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 <u>General Catalog</u>.
- <u>Children in the classroom:</u> 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 (!!!!)].

# **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.

- <u>Plagiarism</u> 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.
- <u>Cheating</u> 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 <u>General Catalog</u> 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.

# **Disabled Student Programs and Services (DSPS)**

Any student with a documented disability who may need educational accommodations should notify the instructor or the <u>Disabled Student Programs and Services</u> (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.

- <u>Blackboard Support Site</u>. The Blackboard Support Site provides a variety of support channels available to students 24 hours per day.
- <u>Learning Services</u>. There are several learning labs on campus to assist students through the use of computers and tutors. Please consult your <u>Campus Map</u> for the <u>Math Lab</u>; <u>Reading, Writing & Language Labs</u>; and the <u>Study Skills Center</u>.
- <u>Library Services</u>. There is more to our library than just books. You have access to tutors in the <u>Study Skills Center</u>, 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 <u>Student Health Center</u> at 760-355-6128 in Room 1536 for more information.

• <u>Mental Health Counseling Services</u>. Short-term individual, couples, family, and group therapy are provided to currently enrolled students. Contact the IVC <u>Mental Health Counseling Services</u> 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 <u>General Catalog</u>.

# **Information Literacy**

Imperial Valley College is dedicated to helping students skillfully discover, evaluate, and use information from all sources. The IVC <u>Library Department</u> provides numerous <u>Information Literacy Tutorials</u> to assist students in this endeavor.

# Anticipated Class Schedule/Calendar

| Monday                | Tuesday | Wednesday           | Thursday |
|-----------------------|---------|---------------------|----------|
| 2/13                  | 2/14    | 2/15                | 2/16     |
| Introduction          |         | 2.1 / 2.2           |          |
| 2/20                  | 2/21    | 2/22                | 2/23     |
| HOLIDAY               |         | 2.2, 2.3            |          |
| 2/27                  | 2/28    | 3/1                 | 3/2      |
| 2.3                   |         | 2.4                 |          |
| 3/6                   | 3/7     | 3/8                 | 3/9      |
| 3.2, 3.3, Ch 2 HW due |         | 3.4, 3.5, 3.6       |          |
| 3/13                  | 3/14    | 3/15                | 3/16     |
| 4.1                   |         | Catch up / Review   |          |
| 3/20                  | 3/21    | 3/22                | 3/23     |
| Exam 1, Ch 3&4 HW due |         | 5.1                 | ,        |
| 3/27                  | 3/28    | 3/29 Manipulatives, | 3/30     |
| 6.1, 6.2              |         | Ch 5 HW due         | ,        |
| 4/3                   | 4/4     | 4/5                 | 4/6      |
| 6.3                   | ,       | 6.4                 | , -      |
| 4/10                  | 4/11    | 4/12                | 4/13     |
| 7.1                   |         | 7.2                 | ,        |
| 4/17                  | 4/18    | 4/19                | 4/20     |
| HOLIDAY               | HOLIDAY | HOLIDAY             | HOLIDAY  |
| 4/24                  | 4/25    | 4/26                | 4/27     |
| 7.3                   |         | Catch up / Review   |          |
| 5/1                   | 5/2     | 5/3                 | 5/4      |
| Exam 2, Ch 6&7 HW due |         | 8.1, 8.2            |          |
| 5/8                   | 5/9     | 5/10                | 5/11     |
| 8.2                   |         | 9.1                 |          |
| 5/15                  | 5/16    | 5/17                | 5/18     |
| 9.2, 9.3              |         | 11.1, 11.2          |          |
| 5/22                  | 5/23    | 5/24                | 5/25     |
| 11.3, 11.4            |         | Catch up / Review   |          |
| 5/29                  | 5/30    | 5/31                | 6/1      |
| HOLIDAY               |         | Exam 3              |          |
| 6/5                   | 6/6     | 6/7                 | 6/8      |
| Review for FINAL      |         | FINAL               |          |

<sup>\*\*\*</sup>Tentative, subject to change without prior notice\*\*\*

### ALL HOMEWORK IS FROM TEXT: LEARNING

### **EXERCISES**

#### **HOMEWORK LIST - MATH 110**

### Chapter 2

2.1:4,5,6

2.2:1,5,6,7

2.3: 2-9, 15-18

2.4:2,4,5

### Chapter 3

3.2:2-4,7-9

3.3:2

3.4: 1-3, 6, 8, 14, 17, 18, 22, 24

3.5:1,2,3,4,9

3.6: Classwork only

#### Chapter 4

4.1: 1, 2, 4, 5, 10, Student errors w/s

### Chapter 5

5.1:3, 6, mental math w/s & percent sense w/s

5.2:2,3,6,7,8

5.3:1,2,3

5.4: scientific notation w/s

### Chapter 6

6.1: 2, 3, 4, 8, 10a, 11, 13, 14, 15, 18, 19

6.2: 2, 3, 5, 6, 11, 12, designer fraction w/s

6.3:1-5,8,9

6.4:3-6,8-10,12,13,17

### Chapter 7

7.1:1, 2, 3, 14, 15

7.2:3,5,8,9,10,12

7.3:1, 2, 3, 7, 13, 14

Pattern block worksheets

### Chapter 8

8.1:1-3

8.2: 4 – 6, ratio/fraction problems w/s

(with illustrations)

#### Chapter 9

9.1: Class discussion only

9.2: 1,2,5,9,12,14,21, ratio & proportion w/s

9.3: Percent w/s

### Chapter 10

Worksheets - extra credit only

### Chapter 11

Number theory w/s (pg. 70 - 72)

11.1: 1, 7, 11, 14, 15

11.2: 3a, b, 4, 7, 8, 13, 14

11.3: 1, 4, 16, 18

11.4: 5 a-d, 6 a-d, 7, 8 a – c (factored form), 20