Syllabus

Math 210-07, CRN 25459, Fall 2019

Instructor: Ms. Rani Fischer, fischerrani@fhda.edu

Office Hours: before each class at 9 AM, location TBA

Classroom: MLC108, 9:30-10:20 AM

Textbook: *Prealgebra Textbook*, 2nd ed., by College of the Redwoods, available free online at
http://mathrev.redwoods.edu/PreAlgText/

Hardcopies sold at https://www.memoriapress.com/curriculum/math/college-of-the-redwoods-prealgebra-textbook/ or possibly in our bookstore

What to bring every day: textbook, Math 210 notebook, loose-leaf paper, pencils, two colored pens

Class Rules:

1. Be considerate and respectful.

2. No calculators or cell phones.

Course Objectives

A. Develop, throughout the course as applicable, systematic problem solving methods
B. Solve problems involving arithmetic operations, including fractions, percents and decimals
C. Apply the order of operations to evaluate numerical expressions
D. Solve problems involving operations with signed numbers
E. Explore the characteristics and properties of real numbers
F. Use estimation to determine approximate solutions and to check the reasonableness of answers
G. Explore rates and ratios and use proportions to solve problems
H. Explore, as applicable throughout the course, the geometry of mathematical measurements and solve problems involving geometric figures and formulas
I. Explore the use of variables in expressions and evaluate algebraic expressions
J. Solve linear equations in one variable numerically and algebraically
K. Interpret linear relationships in two variables numerically, graphically using the Cartesian coordinate system, verbally and algebraically
L. Explore the concept of function
M. Investigate, throughout the course as applicable, how mathematics has developed as a human activity around the world

GRADING:

Homework: HW will be collected.   Look at the schedule below to see when HW is due. **NO LATE HW ACCEPTED. You will get 3 free HW's since sometimes you might be sick or too tired to do HW.** To receive full points for HW, you must have completed HW on the day it is due and show all the steps.   If you give

answers without any explanation as to how you got them, you will not receive full credit. Write me notes to ask me questions in the HW so that I can know where you are stuck. HW is graded 1-5 where 5 is a perfect score. I am grading HW on <u>effort</u>, not for correct answers. <u>You check the odd answers in the back of the book</u>.

Quizzes: You will have a quiz every week based on HW problems. No make-ups allowed. I will tell you when the quiz will be and what it on it.

Tests: There will be several tests. Each test, in addition to covering the current material, will contain several problems from previous chapters to help you retain cumulative information. The tests will be closed books and closed notes. In exceptional circumstances, you may be allowed to take a test early. Any such arrangement must be made in advance, and you must have a serious reason for doing so.

Final Exam: On Tuesday, Dec 10, 9:15 AM is a comprehensive cumulative final exam. <u>Students must score a 60 or above on the final exam to pass.</u>

Grading:	**Course Grade**:
Homework-20%	90-100% =A
Quizzes-20%	80-89% = B
Tests-30%	69-79% = C
Final Exam-30%	60-69% = D
	below 60% =F

Advice: This is a very intense course, and <u>you must have time to do the HW</u>. There is so much HW. If you do not do the HW, you will sink. Please try to get a good night's rest and <u>eat breakfast</u>, not just drink caffeine. That will help a lot.

Also, <u>start the HW as soon as you can</u>. There is so much, that you cannot do it all at once. Start early and take breaks to pace yourself. Remember, <u>you are never alone</u>: you may email me, call a classmate, or go to S43 for drop-in tutoring.

<u>M</u>	<u>T</u>	<u>W</u>	<u>Th</u>	<u>F</u>
<u>9/23</u>	<u>9/24</u>	<u>9/25</u>	<u>9/26</u>	<u>9/27</u>
Sec. 1.1 Whole Numbers, W	Sec 1.2 Add/Sub in W; Sec.1.3 Mult/Div in W	Sec. 1.4 Prime Factorization	1.5 Order of Operations, HW #1 due	Sec. 1.6 & 1.7 Solving equations
9/30	10/1	10/2	10/3	10/4
Sec. 2.1 Intro to Integers (Z), HW #2 due	Sec. 2.2, 2.3 Add/Sub of Z, HW #3 due	Sec. 2.4 Mult/Div in Z	Sec. 2.5 Order of Op. in Z, HW #4 due	Sec. 2.6 Solving equations in Z (1/21 is last day to drop course fully.)
10/7	10/8	10/9	10/10	10/11

Review for Test Ch.1 & 2, HW #5 due	Test on Ch. 1 & 2	Sec. 3.1, 3.2 Algebraic expressions and evaluating them	Sec. 3.3,3.4 Simplifying expressions, HW #6 due	Sec. 3.5 Solving Eq in Z
10/14	10/15	10/16	10/17	10/18
Sec. 3.6 Applic. Solving Eq., HW #7 due	Review Ch 3	Sec. 4.1 Equivalent fractions, HW #8 due	Sec. 4.2 Multiplication of fractions	Sec. 4.3 Division of fractions, HW #9 due (last day to request pass/no pass)
10/21	10/22	10/23	10/24	10/25
Sec. 4.4 Adding/Subtr fractions, HW #10 due	Sec. 4.4 review	Sec. 4.5 Mult/Div. mixed fractions, HW #11 due	Sec 4.6 Adding/Subtr mixed fractions	Sec 4.7 Order of operations, HW #12 due
10/28	10/29	10/30	10/31	11/1
Sec 4.8 Solving eq with fractions	Review Ch 3 & 4, HW #13 due	Test on Ch 3&4	Sec. 5.1 Intro to decimals	Sec. 5.2 Add/Subtr. Decimals, HW #14 due
11/4	11/5	11/6	11/7	11/8
Sec. 5.3 Multiplying decimals	Sec 5.4 Dividing decimals	Sec 5.5 Fractions & decimals, HW #15 due	Sec 5.6 Eq with decimals, HW #16 due	Sec 5.7 Square roots
11/11	11/12	11/13	11/14	11/15
Sec. 5.8 Pythag Theorem, HW #17 due	Sec 6.1 Ratios & rates	Sec. 6.2 Proportions	Sec. 6.2, HW #18 due	Sec 6.3 Unit conversion (Last day to drop with a "W")
11/18	11/19	11/20	11/21	11/22
Review Ch 5,6, HW #19 due	Test Ch 5,6	Sec 7.1 Percent, fraction, & decimal	Sec 7.2 Solving % problems	Sec. 7.3 App of %, HW #20 due
11/25	11/26	11/27	11/28	11/29
Sec. 7.4 % increase/decrease	Sec 7.4	Sec. 8.1 Cartesian plane, HW #21 due	THANKSGIVING HOLIDAY	THANKSGIVING HOLIDAY
12/2	12/3	12/4	12/5	12/6
Sec 8.2 Graphing linear equations	Sec 8.2	Functions, HW #22 due	Review Ch 7, 8 HW #23 due	Test on Ch 7, 8, functions
12/9	12/10	12/11	12/12	12/13
Optional Review Class	FINAL EXAM 9:15 AM			

HW #1: p.9-10, 26-28 (starting with #39), p.44-47 (starting with #18)

HW #2: p. 49, 58, 60, 61, 71-73

HW #3: p. 85, 86, 94, 95 Show the same to both sides of the equation.

HW #4: p.106-109, (do all on p. 107 only), p. 124-126 (skip #37-63), 133-135

HW #5: p. 145-147 (start with #18), 152-154, 167, 168

HW #6: p.177 (#1-20 all), p.183 (#1-28 all), p. 184, 185

HW #7: p.195 (all), 205, 213

HW #8: p.214, 224, 225
HW #9: p.226, 227, 243, 244
HW #10: p.260-262, 271
HW #11: p. 285-288 (skip #105-120)
HW #12: p.297, 299, 308, 309
HW #13: p.321, 322, 336-339 (skip #51-
72)
HW #14: p.353-356 (including #94 and #95)
HW #15: p.366, 367, 382, 383, 395, 397 (#67-76 all; stop at
#76)
HW #16: p.398-399, 408-409
HW #17: p.421, 423, (don't do p.422), 433 (do all on this page)
HW #18: p. 443, 444 (all on this page),
454
HW #19: p.463-465, 475, 477 (#101, 102, & 103 only)
HW #20: p.508-510, 518, 519
HW #21: p. 525, 526, 538-540 (You may use a calculator starting p. 525, but still show all steps of the
algebra.)
HW #22: p. 576- 579, 589-591, print p.4,5 only of function
packet
HW #23: p.4,5 of function packet

Student Learning Outcome(s):

*Demonstrate and apply a systematic and logical approach to solving arithmetic and geometric problems.

*Demonstrate and apply the knowledge and skills required to select the correct introductory formulas, procedures, and concepts from algebra and geometry and use them to solve problems.