

## Fundamentals of Elementary Mathematics II

MTH 212      Winter 2021      CRN 33282

Class Times:      Monday/Wednesday 5:30-7:20; (4 credits)      Class Location:      virtual/zoom  
Instructor:      Sharyn Abbes      Office:      virtual/zoom  
Office Hours:           Email: [abbess@linnbenton.edu](mailto:abbess@linnbenton.edu)

**Course Description:** Second of three courses in the mathematics cluster for prospective elementary and middle school teachers. Develops the understanding of basic mathematical concepts necessary for teaching mathematics in grades K-8. Topics include problem solving & mental math, decimal numbers and integer algorithms for computation, percents, fractions and ratios, probability and statistics.

**Prerequisites:** MTH 211 or equivalent

### Required Materials:

Mathematics for Elementary Teachers, A Contemporary Approach by Musser, Burger, & Peterson, 10<sup>th</sup> Edition  
Mathematics for Elementary Teachers, Student Activities Manual by Riverstone, 10<sup>th</sup> Edition  
Scientific Calculator

### Optional Materials:

Student Hints & Solutions Manual

### Grading and Assessment:

Your grade will be based on the following:

		<u>Grading Scale:</u>
Homework/participation	20%	90%-100%    A
Presentation	20%	80%- 89%    B
Activity Reports	20%	70%- 79%    C
Midterm	20%	60%- 69%    D
Final Exam	20%	0- 59%        F

### Active Participation & Attendance:

I will be taking attendance **every** class. You may have two absences without grade penalty. You will need to be in class in order to earn points for the activities/presentations that will be assigned.

### Homework & Activities:

The homework assigned during the week will be due the following Tuesday by noon. A few questions will be answered at Monday night's class so be prepared. Homework assignments will be graded on completeness, accuracy and clarity. Late homework will only be accepted until the corresponding exam for a maximum of half credit.

**Presentation:**

You will be assigned a topic to present. The presentations will be due during week 10. I will give you more information about the presentations and about how they are graded when they are assigned. (week 5)

**Activities:**

We will be doing lots of activities. You will need to have your Student Activity Manual at each class. You will respond to forum questions & discussions for your grade for the activity. You need to participate in the activity to respond to the forum. You can have up to 2 activity forum grades dropped. Activity forum due dates will be posted on Moodle. Late activity write ups will be accepted until the final for half credit.

**Tests:**

There is a midterm and final. The final will be comprehensive, with a greater emphasis on the material covered since the midterm. There will be no makeups. However, you may use the percentage grade on the final exam to replace the midterm up to a maximum replacement score of 75%. You should make every effort to contact me **before** the scheduled test time if there is any possibility that you may miss a test for an unavoidable reason or if you have a conflict. There are no make-ups for the final exam.

**Help:** If you have questions, PLEASE come see me and ask! I have scheduled office hours but you're welcome to come in at other times too. Additionally, there is a Math Help Desk at the annex —a place you can drop in and receive assistance with your math questions. You also can sign up for 3 hours of peer tutoring per week, for FREE!! Study groups are encouraged! Many students find that working with classmates is the best way to learn and understand the material. You will find links to class notes and other resources on my instructor website.

**Expectations:** I expect that my students will be involved in class. This includes being present, asking questions and participating in discussions. You should come to class prepared (this means you should bring your book, activities manual, etc. in addition to having your work with you). I expect you will be respectful of everyone in the class, in word as well as behavior. Along these lines, I ask that you **turn off and/or put away your cell phone, mp3 player, laptop, etc. during class so as to avoid causing a distraction.**

**Academic Honesty:** I assume that you are ethical and honest. However, if there is an incident of academic dishonesty (cheating), you will receive a score of zero for that test/assignment and the incident will be reported to the college administration for possible further disciplinary action. If there is a second offense, you will receive a grade of F for the course and the incident will be reported to the college administration with a recommendation for disciplinary action.

LBCC prohibits unlawful discrimination based on race, color, religion, ethnicity, use of native language, national origin, sex, sexual orientation, marital status, disability, veteran status, age, or any other status protected under applicable federal, state, or local laws. (for further information <http://po.linnbenton.edu/BPsandARs/> )

Students who may need accommodations due to documented disabilities, who have medical information which the instructor should know, or who need special arrangements in an emergency, should speak with the

instructor during the first week of class. If you have not accessed services and think you may need them, please contact the Center for Accessibility Resources, 917-4789.

The LBCC community is enriched by diversity. Everyone has the right to think, learn, and work together in an environment of respect, tolerance, and goodwill. I actively support this right regardless of race, creed, color, personal opinion, gender, sexual orientation, or any of the countless other ways in which we are diverse.  
(related to Board Policy #1015)

### **MATH 212 Fundamentals of Elementary Mathematics II – Outcomes**

Upon completion of the course, the student will be able to

1. Solve problems and explain mathematical concepts using manipulatives.
2. Explain and apply multiple methods for arithmetic computations with Real Numbers, in particular, decimals, integers and rational numbers.
3. Communicate mathematical concepts and algorithms in a variety of ways: written, verbal, or by demonstration.
4. Demonstrate a basic understanding of statistics and probability.

***The instructor reserves the right to make changes to the syllabus/calendar at any time.***

### Tentative Calendar for Winter 2021

	Monday	Wednesday
Week 1	1/4 Introduction, 7.1	1/6 7.2/7.3
Week 2	1/11 7.3/7.4 (hw #1 due 7.1/7.2)	1/13 7.4
Week 3	1/18 <b>MLK HOLIDAY</b>	1/20 8.1 (hw #2 due 7.3 & 7.4)
Week 4	1/25 8.2 (hw #3 due 8.1)	1/27 9.1
Week 5	2/1 9.2 (hw #4 due 8.2 & 9.1)	<b>2/3</b> 9.2 handout presentation topics
Week 6	2/8 Midterm due (hw #5 due 9.2)	2/10 9.3 (lite) presentation topics due
Week 7	2/15 <b>President's Holiday</b>	2/17 presentation drafts due 10.1/10.2 (hw #6 due 9.3)
Week 8	2/22 10.2(10.3 if time) (hw #7 due 10.1)	2/24 11.1
Week 9	3/1 11.2 ( hw #8 due 10.2 & 11.1)	3/3 11.3 & catch up
Week 10	3/8 presentations	3/10 (hw #9 due ch 11.2 & 11.3)
Finals Week	3/15 <b>Final Exam</b>	

HOMEWORK (subject to change)

7.1: A - 1, 2, 5, 7, 8, 11, 13

B - 1, 2, 11, 13, 17, 21, 22, 24

7.2: A - 4, 5, 6, 12, 13,

B - 1, 2, 15, 19, 26, 34 - 37, 39, 40 due Tuesday 1/12

7.3: A - 4, 6, 9, 20, 21

B - 5, 6, 11, 17 - 19, 22, 29, 34, 40

7.4: A - 2, 3

B - 4, 6, 7, 8, 13, 19, 20, 21, 46, 47, 50 due Thursday 1/21

8.1: A - 6, 7, 10 - 14, 17

B - 15, 16, 23, 31- 33

8.2: A - 1, 2, 3c,d, 4, 5, 8, 12, 21, 22, 29

B - 9, 12, 13, 15, 38, 44 due Tuesday 1/26

9.1: A - 4, 5, 10, 12, 14, 15

B - 42, 43, 45, 47, 48

Midterm

9.2: A - 8, 9, 13, 32

B - 1, 5, 6, 16, 33, 38, 43, 45 - 47 due Tuesday 2/2

9.2: A part 2 - 22, 24a-d, 25a,b

B -22

9.3: A - 7, 11, 12, 27(omit 200th term) B - 14, 21, 22, 30, 32, 34, 35 due Tuesday 2/8

10.1: A- 4a-g, 8, 12abde, 13, 14

B - 32, 33, 34, 36, 38 due Thursday 2/18

10.2: A - 3, 4, 5, 8, 9, 25

B - 32, 33, 34

10.3: A - 3, 11, 12

B - 7, 11, 12, 21, 25 due Tuesday 2/23

11.1: A - 2, 5, 6, 7, 11

B - 27, 28, 29, 30 due Tuesday 3/2

11.2: A - 1, 2, 6, 10, 11

B - 28, 29, 30, 32

11.3: A - 1 - 7

B - 29, 30, 31, 34 due Thursday 3/11