MTH 212

Fundamentals of Elementary Mathematics II (CRN 42948)

Spring 2019

INSTRUCTOR:	Michael Renne	EMAIL:	rennem@linnbenton.edu
OFFICE:	BC-101	OFFICE HOURS:	TR 2:30-3:20 pm
CLASSROOM:	BC-105	TIME:	TR 3:30 – 5:20 pm

REQUIRED TEXT:

Mathematics for Elementary Teachers, A Contemporary Approach by Musser, Burger, & Peterson, 10th Edition Mathematics for Elementary Teachers, Student Activities Manual by Riverstone, 10th Edition *Make it Stick: The Science of Successful Learning by Brown, Roediger, & McDaniel, 1st Edition

CALCULATOR: A scientific calculator is **required**.

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, percent, fractions and ratios, probability and statistics.

Prerequisites: MTH 211 or equivalent.

Student Learning 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, and decimals, integers and rational numbers, in particular.
- 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.

HOW TO GET POINTS:		GRADING :	
Participation/Homework	48 %	А	90 – 100 %
Quizzes (2 @ 12% each)	24 %	В	80 – 89.9 %
Cumulative Final Exam	28 %	С	70 – 79.9 %
		D	60 – 69.9 %
Total	100 %	F	0 – 59.9 %

FINAL EXAM: The <u>comprehensive</u> final exam is worth 28% of your grade and will be administered in class on Tuesday, June 11th, from 4:30 pm to 6:20 pm. **Missed exams cannot be made up unless arranged in advance.**

COURSE PARTICIPATION: There are several ways that course participation is graded. They are described below. **Missed participation points cannot be made up.**

- 1. <u>Attendance</u>: Showing up on time and avoiding distractions during scheduled class periods. Your grade will be negatively impacted for tardiness, leaving early, or egregious inattention.
- 2. <u>In-Class Groupwork</u>: The first 20 minutes of each class period is dedicated to students working in groups to resolve any lingering questions/challenges that arose during the homework. Your grade during this portion of the class period will be based on collegiality and engagement in the discussion.
- Homework: During the groupwork, I will check that each person completed the assigned homework. This will be graded on completion, not accuracy. This will include the common core notes (see below).
- 4. <u>Q & A Session</u>: On most days, right after the groupwork, we will begin a brief question and answer session that will allow for class-wide discussion to resolve any lingering questions/challenges. This will usually last no more than 10 20 minutes. Your grade during this portion of the class period will be based on your collegiality and engagement in the discussion.
- 5. <u>Workbook Activities</u>: After the Q & A session, we will have 15 to 20 minutes to work on an activity from the workbook that accompanies the textbook. You need to prepare for these in advance.
- 6. <u>Homework Exercise Presentations</u>: On most days, the remaining class time of each class period will be dedicated to students presenting their work on selected exercises to the rest of the class. The exercises will be selected from either the homework, the workbook activity, or any exercise from a previous class period.

Presentations will be graded A, B, C, D, or F, based on elements like clarity, correctness, methodology, pedagogy, etc. You will also be graded on any discussion of pedagogical strategies, so you need to be prepared to justify strategies that you use. If you are not presenting, you will receive a grade based on your participation and manners as a listener and colleague.

At the end of each day that includes presentations, you will receive a participation grade for the day, even if you are absent. Grades will be given as 3%, 2%, 1%, or 0% of your course grade earned for that day. The next class period, you will be handed a slip of paper with your daily participation grade that resembles the following:

Name:				Date:			
	Attendance	Groupwork	Homework	Q & A	Workbook	Presentation	Grade
	v or 0 or $-$	√ or 0	√ or ? or 0	v or 0	√ or 0	A, B, C, D, or F	3%, 2%, 1%, or 0%
Notes/Comments:							

QUIZZES: There are two 45-minute quizzes, each of which is worth 12% of your course grade. Each quiz will be graded as A, B, C, D, or F on each exercise. The overall quiz grade will be a weighted average of the individual exercise grades and will correspond to your course grade as below. **Missed quizzes cannot be made up.**

Letter Grade	Course Grade	Letter Grade	Course Grade	Letter Grade	Course Grade
A +	13%	А	12%	A -	11%
B +	10%	В	9%	В -	8%
C +	7%	С	6%	C -	5%
D +	4%	D	3%	D -	2%
F +	1%	F	0%		

HELP: If you have any questions, please ask. I will help you whenever I can. You will find me in my office during my office hours or any other time you can catch me. There are free tutors that can help you when you are having difficulties. Don't hesitate to take advantage of these or any other resources offered by the college in support of your learning.

Academic Dishonesty & Student Conduct: If there are any incidents of cheating, an incident report will be sent to the Director of Admissions, and it will have severe consequences for the student. Furthermore, students are expected to abide by all LBCC policies regarding student conduct.

Special Circumstances: 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 their instructor during the first week of class. If you believe you may need accommodations but are not yet registered with the Center for Accessibility Resources (CFAR), please visit the <u>CFAR Website</u> for steps on how to apply for services or call 541-917-4789.

Request for Special Needs or Accommodations: Direct questions about or requests for special needs or accommodations to the LBCC Disability Coordinator, RCH-105, 6500 Pacific Blvd. SW, Albany, Oregon 97321, Phone 541-917-4789 or via Oregon Telecommunications Relay TTD at 1-800-735-2900 or 1-800-735-1232. Make sign language interpreting or real-time transcribing requests 2-4 weeks in advance. Make all other requests at least 72 hours prior to the event. LBCC will make every effort to honor requests. LBCC is an equal opportunity educator and employer.

LBCC Comprehensive Statement of Nondiscrimination: LBCC prohibits unlawful discrimination based on race, color, religion, ethnicity, use of native language, national origin, sex, sexual orientation, gender, gender identity, marital status, disability, veteran status, age, or any other status protected under applicable federal, state, or local laws. For further information see Board Policy P1015 in our <u>Board Policies and Administrative</u> <u>Rules</u>. Title II, IX, & Section 504: Scott Rolen, CC-108, 541-917-4425; Lynne Cox, T-107B, 541-917-4806, LBCC, Albany, Oregon. To report: <u>linnbenton-advocate.symplicity.com/public_report</u>

Statement of Inclusion: To promote academic excellence and learning environments that encourage multiple perspectives and the free exchange of ideas, all courses at LBCC will provide students the opportunity to interact with values, opinions, and/or beliefs different than their own in safe, positive and nurturing learning environments. LBCC is committed to producing culturally literate individuals capable of interacting, collaborating and problem-solving in an ever-changing community and diverse workforce.

Basic Needs: If you have difficulty affording groceries or accessing enough food to eat every day, or if you lack a safe and stable place to live, and you believe that this may affect your performance in this course, then you are urged to contact the Single Stop Office for support. The Single Stop Office can help students get connected to resources for help.

Email: <u>SinglestopatLBCC@linnbenton.edu</u> Web: <u>https://www.linnbenton.edu/current-students/student-support/</u> Phone: (541) 917-4877

LBCC Email and Course Communications: You are responsible for all communications given in class or sent via Moodle and/or to your LBCC email account. You are required to use your LBCC provided email account for all email communications at the College. You may access your LBCC student email account through Student Email and your Moodle account through Moodle.

Changes to the Syllabus: I reserve the right to change the contents of this syllabus due to unforeseen circumstances. You will be given notice of relevant changes in class, through a Moodle Announcement, or through LBCC e-mail.

MTH 212 – Spring 2019 (Tentative schedule)

(rentative senerate)						
		М	Т	W	R	F
WEEK 1	4/1		Introduction		7.1, 7.2 (P)	
WEEK 2	4/8		7.2, 7.3 (P)		7.3, 7.4 (P)	
WEEK 3	4/15		7.4 (P)		8.1 (P)	
WEEK 4	4/22		8.2 (P)		9.1 (P)	
WEEK 5	4/29		9.2 Quiz on Ch. 7 & 8		9.2 (P)	
WEEK 6	5/6		9.2 (P)		9.2 (P)	
WEEK 7	5/13		9.3 (P)		10.1, 10.2 (P)	
WEEK 8	5/20		10.2, 10.3 (P)		11.1 (P)	
WEEK 9	5/27		11.1, 11.2 Quiz on Ch. 9 & 10		11.2 (P)	
WEEK 10	6/3		11.3 (P) & Make it Stick		Review for Final Exam	
FINALS		6/11 →	Cumulative Final 4:30 – 6:20pm			

(P) = Class period with presentations.

Important Dates:

4/8:	The last day to drop.
5/17:	The last day to withdraw.
5/27:	Holiday, no school.

Homework Exercises from the Textbook

Section	Α	В	Approx. Date
7.1	1, 2, 5, 7, 8, 11, 13	1, 2, 11, 13, 17, 21, 22, 24	Apr 4
7.2	4, 5, 6, 12, 13	1, 2, 15, 19, 26, 34 – 37, 39, 40	Apr 4
7.3	4, 6, 9, 20, 21	5, 6, 11, 17 - 19, 22, 29, 34, 40	Apr 9
7.4	2, 3	4, 6, 7, 8, 13, 19, 20, 21, 46, 47, 50	Apr 11
8.1	6, 7, 10 – 14, 17	15, 16, 23, 31 – 33	Apr 18
8.2	1, 2, 3c,d, 4, 5, 8, 12, 21, 22, 29	9, 12, 13, 15, 38, 44	Apr 23
9.1	4, 5, 10, 12, 14, 15	42, 43, 45, 47, 48	Apr 25
9.2	8, 9, 13, 32	1, 5, 6, 16, 33, 38, 43, 45 – 47	Apr 30
9.2	22, 24a-d, 25a,b	22	May 7
9.3	7, 11, 12, 27(omit 200th term)	14, 21, 22, 30, 32, 34, 35	May 14
10.1	4a-g, 8, 12abde, 13, 14	32, 33, 34, 36, 38	May 16
10.2	3, 4, 5, 8, 9, 25	32, 33, 34	May 16
10.3	3, 11, 12	7, 11, 12, 21, 25	May 21
11.1	2, 5, 6, 7, 11	27, 28, 29, 30	May 23
11.2	1, 2, 6, 10, 11	28, 29, 30, 32	May 28
11.3	1-7	29, 30, 31, 34	Jun 4

For *each section above*, you will be expected to find <u>one</u> common core standard that is related to that section and write down the standard number and its official description. If the official description is more than one paragraph, you may write the first paragraph.