

MATH 215: Math for Elementary and Middle School Teachers III

Instructor

Dr. Ariel Ramirez

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Office: LRC 172

Class Details

Monday/Wednesday

Class Time: 10:30-11:45am

Room: Valencia Business & Technology 119

Office Hours

M/W 1-2:15pm (Math Center)

T/Th 10-11:15am (Math Center)

Course Description

Algebra from the viewpoint of the elementary curriculum with emphasis on proportional and linear relationships. Also included: topics from probability and statistics with connections to other topics in elementary curriculum. Problem solving is emphasized throughout. (3 Credit Hours).

Prerequisites/placement: Successful completion of MATH 111. Meets UNMCC – Area 2: Mathematics.



Course Outcomes

Goal 1: Understand data analysis from the viewpoint of elementary school curriculum, such as making and interpreting dot plots, pictograph, and bar graphs.

SLO 1: By the end of the course, students will be able to display, analyze, and interpret data.

Goal 2: Know how to use appropriate vocabulary, notation, and reasoning in valid mathematical explanations.

SLO 2: By the end of the course, students will be able to construct valid mathematical explanations.

Goal 3: Understand problem solving in the context of mathematical applications.

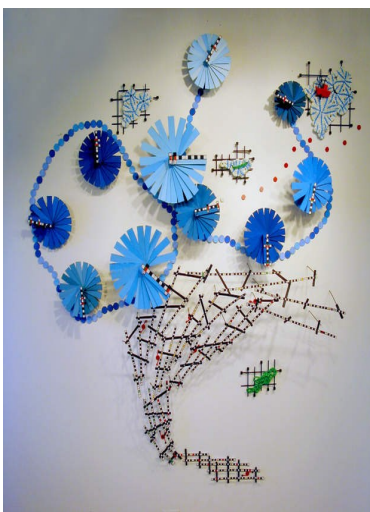
SLO 3: By the end of the course, students will be able to model and solve a variety of mathematical applications using various approaches relevant to the K-8 curriculum.

Goal 4: Understand the interconnectedness of elementary mathematical concepts and relate these concepts to application problems.

SLO 4: By the end of the course, students will be able to communicate how various mathematical concepts are interconnected and describe the application of mathematics in a diverse range of fields.

Goal 5: Understand algebraic concepts from the viewpoint of elementary school curriculum.

SLO 5: By the end of the course, students will be able to demonstrate understanding of algebraic concepts of the K-8 curriculum.



"Happy Dog" - Nathalie Miebach

Contents

Course Description	1
Course Outcomes	1
Classroom Policies	2-3
Course Materials	3
Student Resources	3
University Policies	4
Important Dates	4



Classroom Policies

Attendance / Notes / Participation

- You are expected to be on time to each class and stay the entire class, have the necessary course materials on hand, and participate in the lecture and/or group activities.
- If you know ahead of time you will miss a class, send me an email indicating the date of the absence.
- Arrange before the next class meeting to get notes from a classmate. The student bears full responsibility for the material and information covered in class.
- Each student starts with 50 attendance points. Attendance is taken at the **beginning** of class. Five attendance points are deducted for each unexcused absence; 2.5 attendance points for tardiness.

Homework

- Homework is assigned nearly every week at the end of the week.
- The homework will be due the following week before the beginning of class.
- **Late homework is not accepted.**

Group Assignments

- There will be 2 or 3 small assignments to be completed in a group.
- Groups will be between two and three students.
- These assignments will further develop your conceptual understanding of the topics presented in the course.
- **You must be present to participate and receive any credit.**



abogallery.com - Internet's biggest art collection

"Gorge Improvisation" - Kandinsky 1914

Exams/Final Exam

- A couple of exams will be given during the semester. Students are expected to clearly show their work.
- All of the tests (including the final exam) will be a paper/pencil test where students are expected to show all work to get full credit.
- If you are unable to take a test, you must notify me in advance of the scheduled test. I will determine if and when a make-up test is to be administered.
- The final exam in this class is worth 100 points. The sections covered will be communicated as we near the end of the semester.
- Permission to take the final exam other than as scheduled occurs only under extenuating circumstances as approved by me. Emergency situations will be considered on an individual basis.

Classroom Policies (cont'd)

Grading Distribution & Scale

Attendance	50 points
Homework	200 points
Group Assignments	50 points
Exams	200 points
<u>Final Exam</u>	<u>100 points</u>
Total	600 points

GRADING SCALE: Students in this course will receive the following grades:

A	90 – 100%
B	80 – 89%
C	70 - 79%
D	60-69%
F	0-59%



Blaise Pascal 1623-1662

The French philosopher and scientist, was one of the greatest and most influential mathematicians of all time. He was also an expert in hydrostatics, an inventor, and a well-versed religious philosopher. In 1654, Pascal began corresponding with mathematician **Pierre de Fermat**. He conducted experiments with dice and discovered that there was a fixed likelihood of a particular outcome. This was the beginning of the field of probability. Fermat and Pascal are today recognized as the co-founders of probability theory.

www.famousscientists.org/blaise-pascal/

Course Materials

Textbook(s):

- ◆ Bassarear, T., and Moss, M. (2016). Mathematics for elementary school teachers., 6th edition. Cengage Learning. Boston, MA.
- ◆ Bassarear, T., and Moss, M. (2016). Explorations, Mathematics for elementary school teachers., 6th edition. Cengage Learning. Boston, MA.

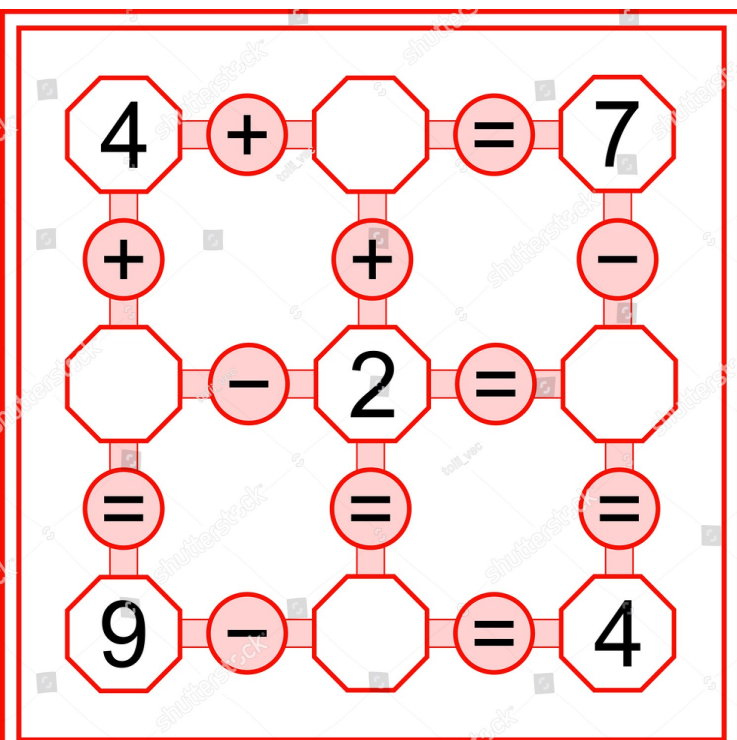
Student Resources

The Learning Commons tutors are available Monday through Thursday from 8am to 6pm, and Fridays from 8am to 1pm. There are also open computer labs on campus for student use. The Valencia Campus Library provides a quiet atmosphere for study and is an excellent resource for supplementary materials. **I will also be available in the Math Center during my office hours for help.**

University Policies

Classroom Expectations

Students are expected to conduct themselves in a polite, courteous, professional and collegial manner. Cell phones must be set on silent and be out of sight during class. The instructor reserves the right to further limit use if, in his/her opinion it is interfering with the orderly functioning of the class. No food or drink is allowed in the computer labs.



Disability Statement

If you have a documented disability, please provide me with a copy of your letter from Equal Access Services as soon as possible to ensure that accommodations are provided in a timely manner. The Equal Access Office can be reached at 925-8510.

UNM's Policy on Academic Honesty

Each student is expected to maintain the highest standards of honesty and integrity in academic and professional matters. The University reserves the right to take disciplinary action, including dismissal, against any student who is found responsible for academic dishonesty. Any student who has been judged to have engaged in academic dishonesty in course work may receive a reduced or failing grade for the work in question and/or for the course. Academic dishonesty includes, but is not limited to, dishonesty in quizzes, tests or assignments, claiming credit for work not done or done by others; hindering the academic work of other students; and mis-

representing academic or professional qualifications within or outside the University.

Title IX Reporting Obligations

In an effort to meet obligations under Title IX, UNM faculty, Teaching Assistants, and Graduate Assistants are considered responsible employees. This designation requires that any report made to a faculty member, TA, or GA regarding sexual misconduct or gender discrimination must be reported to the Office of Equal Opportunity and the Title IX Coordinator. For more information on the campus policy regarding sexual misconduct, see: <https://policy.unm.edu/universitypolicies/2000/2740.html>

Important Dates

Last day to add or change grading mode on LOBOWeb:
Last date to drop without a grade:
Spring Break:
Last date to drop without Dean's Permission:
Last date to change grading mode with form
Last date to drop with Dean's permission
Finals

Friday, January 26, 2018
Friday, February 2, 2018
March 12-16, 2018
Friday, April 13, 2018
Friday, May 4, 2018
Friday, May 4, 2018
Week of May 7th, 2018