DESCRIPTION
To investigate the concepts which underlie the mathematics encountered in the elementary classroom and the method to which it is delivered

INSTRUCTOR:  Dr. David Buhl

CLASS:  10:00 - 11:00  M, W, Th, F  West Science 3806
        12:00 - 1:00  M, W, Th, F  West Science 3806

OFFICE:  New Science Facility 1117

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EVALUATION:  (Tentative)
We are tentatively scheduled for three exams (each worth 100 pts), quizzes (total 100 pts), and a final (150 pts). You will also be graded on attendance. We will follow the 90/80/70/60 percent for the grading over total possible pts.

Exam 1 (Chapter 8 & 9):  TBA
Exam 2 (Chapter 10):  TBA
Exam 3 (Chapter 11):  TBA
Exam 4 (Chapter 12):  TBA
Final (Chapters 10,11,12)  Monday, April 28 (8-10 a.m.) or Wed, April 30 (12-2pm)

GRADING (Percent)
100 - 90  A (-)
89 - 80  B (+ or -)
79 - 70  C (+ or -)
69 - 60  D (+ or -)

ATTENDANCE POLICY:
ATTENDANCE IN CLASS IS REQUIRED. There are no make up quizzes or exams due to absences. Attendance will be worth 50 pts of your grade. I will not take attendance every day. Your pts will be calculated by # days present/# days attendance is taken multiplied by 50 pts.

DISABILITY SERVICES
If you have a need for disability-related accommodations or services, please inform the Coordinator of Disability Services in the Disability Services Office at 2001 C. B. Hedgcock (227-1700). Reasonable and effective accommodations and services will be provided to students if requests are made in a timely manner, with appropriate documentation, in accordance with federal, state, and University guidelines.
Upon successful completion of this course, the student should be able to:

- Identify and categorize plane and three-dimensional figures, based on their properties.
- Apply logical arguments and formal proofs through the use of inductive and deductive reasoning.
- Use the definitions of congruency and similarity to compare and contrast pairs of objects.
- Combine and apply different types of transformations to a geometric figure and predict the result.
- Develop proficiency in using both the metric and English systems of measurement, and be able to convert between the two.
- Concretely examine perimeter and area and solve problems involving these properties.
- Concretely examine the concepts of surface area and volume of three-dimensional objects and solve problems involving them.
- Use the Pythagorean Theorem discovered in the study of right triangles to develop the distance and midpoint formulas. Apply these formulas to find the lengths of objects superimposed on a coordinate system.
- Demonstrate an understanding of experimental probability and apply the concepts of theoretical probability and simulation to the design and solution of probability problems.
- Make and use various statistical graphs to describe and summarize data.
- Examine the clustering and dispersion of data and relate these to the “normal” distribution.
- Solve problems in probability and statistics.

Evaluation of these learning outcomes will be measured through:

- In-class group work
- Homework assignments and
- Exams