

MTH 1060, Section 01: Mathematics for Elementary Teachers II

Spring, 2017

Meeting time: Monday, Wednesday, Friday—11:00 to 11:50

Class location: Janet Ayers Academic Center (JAAC) 2150

Credit hours: 3

**Instructor Information:**

Dr. Ryan Fox, Assistant Professor of Mathematics Education

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Office location: JAAC 4035

Office hours: Tuesdays 11:00–12:00, 2:00–4:00; Wednesdays 2:00–4:00; Thursdays 2:00–4:00

**Course Information:**

Description from current catalogue: Topics include data analysis, probability, geometry, and measurement.  Critical thinking and problem solving will be emphasized.

Goals for the course: My overarching goal can be summed up by the question a child can pose so well: “*But, why?*” Over your academic career, you have probably seen many of the topics we will cover in class. However, what gives this course its college credit is the depth that you have probably not explored before.

Relevant pre-requisites: MTH 1050

Methods of instruction: This course relies on two primary methods of instruction. Before each class, I will expect you to read the corresponding section of the textbook. The first method of instruction is a strong reliance on in-class group work. You will find challenging questions at the end of each section of the textbook; we will use these questions as the basis of group work. At the end of each class section, I will assign a small number of questions out of the textbook. Completing these homework questions are the secondary methods of instruction. (So, please bring your text to class every class session!) Now that I have scared you, please do know I am here to help. We learn best by learning together.

Course requirements: The required textbook is:

Long, C. T., DeTemple, D. W., & Millman, R. S. (2015). *Mathematical reasoning for elementary teachers* (7th ed.). Boston, MA: Pearson.

Additionally, a four-function calculator will be sufficient for this course.

Attendance: The stated Belmont policy on attendance is:

Absence is permitted only in cases of illness or other legitimate cause. Attendance is checked from the first class meeting, so late registrants will have some absences accrued when they first meet a class. In cases of legitimate absence from the class, the student has the opportunity and responsibility to make up all class work missed. If a class absence is necessary because of an activity by another class or university organization, the sponsor of the activity will give the Provost a list of participants in advance, and the students involved will obtain from the Provost an excuse to present to the instructor. In case of absence for any other reason, the student will present his reason directly to the instructor…. FN indicates that the student failed the course due to excessive absences. When the number of absences for any reason exceeds four times the number of scheduled class meetings per week…the student is involuntarily dropped from the course and a final grade of FN is recorded.

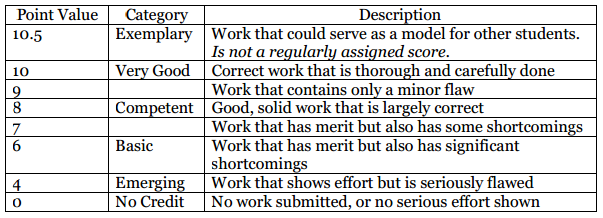
I will hold to the FN policy. Because this course meets three times per week, a student will receive FN after the 12th absence. In order to provide sufficient warning, I will provide email notifications after the 6th, 9th, 10th, and 11th absence.

Policy for late work, absence from class, absence from tests and exams:

I want you to attend every class; you miss something in class that cannot be made up in any other format. However, should you have an excused absence, I will gladly work with you to make up the material missed. If the day you miss does not involved a graded assignment, please visit office hours or schedule an appointment to discuss the missed material. If you have an excused absence when homework is collected, please submit the homework on the next class day. For unexcused absences and homework not turned by the end of office hours of the due date, you are permitted to submit late work with a potential 10% deduction per class session. If you miss a quiz or test because of an excused absence, please schedule a make-up as soon as possible.

**Methods of Evaluation:**

Each question is graded on the following 10-point scale. To determine the percent for each assignment and test, divide your points by the total number of points possible and multiply by 100.



Homework will be collected on a weekly basis, usually on Wednesday of the following week. Please see the grade sheet file on Black Board for all official due dates. For all homework assignments, I will allow students to submit revisions. (I make this offer for two reasons. The first reason is to allow students an opportunity to “see how I grade”. The second reason is to encourage students to build a stronger understanding of the material presented in class than would be allowed by doing the assignment only one time.)

Four major tests are currently scheduled throughout the semester. Each test will cover one or two textbook chapters; I attempt to organize the tests by theme (Algebra, Geometry & Measurement, Similarity & Congruence, and Data Analysis & Probability) more than textbook coverage. Please plan the four dates accordingly!

*Statement regarding expectation of student participation in course evaluations*

At the end of the semester, the Office of the Provost will email you a link to complete a course evaluation for this section. Please do take this opportunity to “grade me”. You will have opportunities to assign scores on how well I teach and how helpful this course is toward your general education. Keep that information in mind throughout the semester, and be able to write out the positives of this course and opportunities to improve the teaching of this course (and the course itself!).

*Percentage for each assignment:*

The student will get the better weighted average of the following two options:

Option 1: Each of the four tests count 25% of the final grade

Option 2: The homework average is 20% of the final grade, each of the four tests count 20% of the final grade

*Grading scale for assignment of letter grades:*

The following averages correspond to the minimum percent needed to **guarantee** the respective letter grades. The instructor reserves the right to adjust the cutoff scores accordingly.

A = 94.0%, A- = 91.0%

B+ = 88.0%, B = 85.0%, B- = 82.0%

C+ = 80.0%, C = 75.0%, C- = 72.5%

D = 70.0%

**University policies:**

*Honor Code*:

I will not give or receive aid during examinations; I will not give or receive false or impermissible aid in course work, I the preparation of reports, or in any other type of work that is to be used by the instructor as the basis of my grade; I will not engage in any form of academic fraud. Furthermore, I will uphold my responsibility to see to it that others abide by the spirit and letter of this Honor Pledge.

*Accommodation of disabilities*:

In compliance with Section 504 of the Rehabilitation Act and the Americans with Disabilities Act, Belmont University will provide reasonable accommodation of all medically documented disabilities. If you have a disability and would like the university to provide reasonable accommodations for the disability during this course, please notify the Office of the Dean of Students located in the Beaman Student Life Center (460-6407) as soon as possible.

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| Monday, January 9 | Wednesday, January 11  Section 7.3 | Friday, January 13  Section 7.4 |
| Monday, January 16  Martin Luther King, Jr. Birthday (Observed) | Wednesday, January 18  Section 8.1 | Friday, January 20  Section 8.2 |
| Monday, January 23  Section 8.3 | Wednesday, January 25  Review for Test 1 | Friday, January 27  Test 1—Algebra |
| Monday, January 30  Section 9.1 | Wednesday, February 1  Section 9.2 | Friday, February 3  Section 9.3 |
| Monday, February 6  Section 9.3 Exploration: Toothpicks and Marshmallows | Wednesday, February 8  Review Chapter 9 | Friday, February 10  Section 10.1 |
| Monday, February 13  Section 10.2 | Wednesday, February 15  Section 10.2 Exploration: | Friday, February 17  Section 10.3 |
| Monday, February 20  Section 10.4 | Wednesday, February 22  Section 10.5 Exploration: | Friday, February 24  Section 10.5 |
| Monday, February 27  Review for Test 2 | Wednesday, March 1  Test 2—Geometry and Measurement | Friday, March 3 |
| Monday, March 6  Spring Break | Wednesday, March 8  Spring Break | Friday, March 10  Spring Break |
| Monday, March 13  Pi Day (Celebrated) | Wednesday, March 15  Section 11.1 | Friday, March 17  Section 11.2 |
| Monday, March 20  Section 11.3 | Wednesday, March 22  Section 12.1 | Friday, March 24  Section 12.2 |
| Monday, March 27  Section 12.3 | Wednesday, March 29  Review for Test 3 | Friday, March 31  Test #3—Symmetry and Similarity |
| Monday, April 3  Section 13.1 | Wednesday, April 5  Section 13.2 | Friday, April 7  Section 13.3 |
| Monday, April 10  Review Chapter 13 | Wednesday, April 12  Section 14.1 | Friday, April 14  Good Friday |
| Monday, April 17  Section 14.2 | Wednesday, April 19  Section 14.3 | Friday, April 21  Section 14.4 |
| Monday, April 24  Review for Final Test |  | Friday, April 28  Test #4—Data Analysis and Probability |

This is a tentative class schedule, organized by textbook sections. For each unit of material (Algebra, Geometry & Measurement, Symmetry & Similarity, Data Analysis & Probability), please refer to Black Board for additional information.