Foundations of Elementary School Mathematics
MATH 201 Course Schedule, All Sections, Spring 2020

This is the MATH 201 Spring 2020 course schedule which lists weekly assignments and course materials. In the textbook you will find Selected Answers for Learning Exercises on pages ANS-1 to ANS-36. Note that your instructor may alter this schedule (though all sections will ultimately cover the same material).

The Computational Assessment will be given on the first class session of Week 3. In preparation for it:
- Complete the Practice Computational Assessment for Week 2. You will find the Practice Computational Assessment (and answers) on the course web page: http://www.math.niu.edu/courses/math201

Please note the following upcoming assignments. Both of these are class requirements; they are not optional.

Assignment to be ready for Week 7
- Read Section 16.1 pages 401–405 and Section 16.3 pages 413–415. Study the definitions for all terms. Some students find it helpful to write each definition on one 3” x 5” index card (term goes on one side; definition goes on the other side).

Assignment to be ready for Week 8
- In Section 17.2, complete Activity 3 Fold Them Up (preliminary homework activity). Make one copy of the nets labeled A through G, I, N, and O. Cut out the copies and construct the polyhedra. These polyhedra and a container to hold them are for use with Section 17.2.

Week 1, beginning January 13

Section 6.3 (Equivalent Fractions)
Assignment: Learning Exercises for Section 6.3 #5 (parts a, b, c, and d), 6 (parts a, b, and c)

Section 6.4 Relating Fractions, Decimals and Percents
Assignment: Learning Exercises for Section 6.4 #1, 2 (parts a-e), 3, 4 (parts a-b), 8, 9, 10 (parts a, b).

Reminder: Bring your completed Practice Computational Assessment to the last class session next week.

Quiz 1

Week 2, beginning January 21 (January 20 is Martin Luther King, Jr. Day and there are no classes at NIU on Martin Luther King, Jr. Day)

Section 7.2 (Multiplying by a Fraction), and Learning Exercises for Section 7.2 #8, 9
Assignment: Learning Exercises for Section 7.2 #1, 2, 5, 6, 12 (parts a, b), 15 (parts a, b), 18

Section 7.3 (Dividing by a Fraction)
Assignment: Learning Exercises for Section 7.3 #1, 4, 5, 6, 7, 11, 13, 14
Assignment: Section 7.5 Check Yourself, all items
Reminder: The Computational Assessment will be given during the first class session next week.

Quiz 2
Week 3, beginning January 27

First class session: Computational Assessment (1/2 hour maximum, no calculators)

Section 2.3 (Place Value and Bases Other than Ten)
Learning Exercises for Section 2.3 #2, 3 (parts a, b, c), 5 (parts a, b), 17 (part b), 18 (parts a, b, c, d)

Section 2.4 (Operations in Different Bases)
Learning Exercises for Section 2.4 #2 (parts a, c), 4 (part a), 5 (part c) Assignment: Section 2.6 Check Yourself #1-5, 7-8.

Section 3.3 (Ways of Thinking about Multiplication) Exclude Activity 9, but include the discussion of the commutative, associative, and distributive properties
Assignment: Learning Exercises for Section 3.3 #1 (parts a and b), 3, 9 (part a), 10 (part a)

Section 3.4 (Ways of Thinking about Division)
Assignment: Learning Exercises for Section 3.4 #4, 6, 8 (parts a, b, c, and d)
Assignment: Section 3.7 Check Yourself #4, 7
Reminder: Exam 2 will be given during your last class session next week.

Quiz 3

Week 4, beginning February 3

Section 4.1 (Operating on Whole Numbers and Decimals) and Learning Exercises for Section 4.1 #1 (parts a and c)
Assignment: Section 4.3 Check Yourself #1, 2, 3

Chapter 6 Introduction, Section 6.1 (Understanding the Meanings of a/b), and Learning Exercises for Section 6.1 #22 (parts a, b, c, d)
Assignment: Learning Exercises for Section 6.1 #2, 3 (part b), 10 (part a), 11, 21

Section 6.2 (Comparing Fractions)
Assignment: Learning Exercises for Section 6.2 #4, 5

Exam 1

Week 5, beginning February 10

Section 9.2 (Comparing Ratios; Exclude Activity 3) and Learning Exercises for Section 9.2 #18, 19
Assignment: Learning Exercises for Section 9.2 #1 (parts a, b), 2 (parts a, b), 5, 8, 9, 11, 12, 13

Section 9.3 (Percents in Comparisons and Changes) and Learning Exercises for Section 9.3 #5, 6, 8, 11, 15
Assignment: Learning Exercises for Section 9.3 #1, 2, 4 (parts a, b, c), 9, 14, 16, 20, 21
Assignment: Section 9.6 Check Yourself #3-9
Reminder: Exam 3 will be given during your last class session next week.

Quiz 4

Week 6, beginning February 17

Section 12.2 (Numerical Patterns and Algebra)
Assignment: Read “Message to Prospective and Practicing Teachers” at the beginning of your textbook
Assignment: Learning Exercises for Section 12.2 #1, 2, 3 (parts a and b)

Section 12.3 (Functions and Algebra) through Example 20, Learning Exercises for Section 12.3 #3, 4, 7, 9, 19
Assignment: Learning Exercises for Section 12.3 #1, 2, 5, 8, 10
Assignment: Section 12.7 Check Yourself #5-8

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Reminder: Read Section 16.1 pages 401–405 and Section 16.3 pages 413–415. Study all definitions.

Quiz 5

Week 7, beginning February 24

Section 13.2 (Slope)
Assignment: Learning Exercises for Section 13.2 #1, 3, 4, 5, 10
Assignment: Section 13.6 Check Yourself #4-8

Section 16.1 (Review of Polygon Vocabulary) and Learning Exercises for Section 16.1 #10
Assignment: Learning Exercises for Section 16.1 #1, 2, 5 (part a), 6, 9, 11, 12, 17, 18
Reminder: Assignment to be ready for Week 8: In Section 17.2, complete Activity 3 Fold Them Up (preliminary homework activity). See information above. [Note: This is a class requirement. (It is not optional.)]

Section 16.2 (Organizing Shapes)
Assignment: Learning Exercises for Section 16.2 #1, 2, 4

Section 16.3 (Triangles and Quadrilaterals) and Learning Exercises for Section 16.3 #1
Assignment: Learning Exercises for Section 16.3 #6
Assignment: Section 16.6 Check Yourself, all items

Quiz 6

Week 8, beginning March 2

Section 17.1 (Faces and Nets)
Assignment: Learning Exercises for Section 17.1 #1, 3, 5, 6

Assignment: Learning Exercises for Section 17.2 #1, 7, 9, 13
Assignment: Section 17.7 Check Yourself, all items

Exam 2

Note: The last day to withdraw from this course without penalty is Friday March 6, 2020.

Week 9, beginning March 16 (the week of March 9 is Spring Break)

Section 23.1 (Key Ideas of Measurement) and Learning Exercises for Section 23.1 #2, 6, 7, 12, 16
Assignment: Learning Exercises for Section 23.1 #5, 18

Assignment: Learning Exercises for Section 23.2 #1, 5, 9, 21, 22, 24 (first diagram)
Assignment: Learning Exercises for Section 23.2 #12 (parts a, b, c, d), 14, 25 (parts b, c, e, f), 30, 35
Assignment: Section 23.4 Check Yourself, all items

Quiz 7

Week 10, beginning March 23

Section 24.1 (Area and Surface Area; Exclude Discussion 4 and Example 2) and Learning Exercises for Section 24.1 #11 (parts a and c), 12 (parts a, b), 14 (part a)
Assignment: Learning Exercises for Section 24.1 #12 (parts c, d, e, f, g, h), 17, 26, 28
| Section 24.2 (Volume; End with Discussion 7) and Learning Exercises for Section 24.2 #14 (part a) |
| Assignment: Learning Exercises for Section 24.2 #1, 2, 13, 14 (parts b and c) |
| Assignment: Section 24.4 Check Yourself, #1-3, 5-7 |

| Section 25.1 (Circumference, Area, and Surface Area Formulas; Exclude sphere) and Learning Exercises for Section 25.1 #2 (parts c and d), 5, 16 (part a), 18 (parts a, c, g, iii for c, g) |
| Assignment: Learning Exercises for Section 25.1 #1, 2 (parts a and b), 13, 14, 18 (parts b, d, h) |

| Quiz 8 |

| **Week 11, beginning March 30** |
| Section 25.2 (Volume Formulas; Exclude sphere and Example 3) |
| Assignment: Learning Exercises for Section 25.2 #1, 2, 5 (parts a, c) |
| Assignment: 25.4 Check Yourself, all items |

| Section 26.1 (Pythagorean Theorem; Exclude Examples 2 and 3 and Activity 2) and Learning Exercises for Section 26.1 #1, 2 |
| Assignment: Learning Exercises for Section 26.1 #3, 10, 18 |
| Assignment: Section 26.3 Check Yourself, #1 |

| **Week 12, beginning April 6** |
| Section 27.2 (Methods of Assigning Probabilities) and Learning Exercises for Section 27.2 #4, 5, 6, 12, 13 |
| Assignment: Learning Exercises for Section 27.2 #7, 9, 14, 16, 19 |

| Section 27.3 (Simulating Probabilistic Situations) and Learning Exercises for Section 27.3 #1, 2 |
| Assignment: Learning Exercises for Section 27.3 #4 |
| Assignment: Section 27.5 Check Yourself #2-8, 10 |

| Section 28.1 (Tree diagrams and Lists for Multistep Experiments) and Learning Exercises for Section 28.1 #2, 3 |
| Assignment: Learning Exercises for Section 28.1 #7, 8 |

| Exam 3 |

| **Week 13, beginning April 13** |
| Section 29.1 (What Are Statistics) |
| Assignment: Learning Exercises for Section 29.1 #2, 3 |

| Section 29.2 (Sampling: The Why and the How) through p. 700 |
| Assignment: Learning Exercises for Section 29.2 #9 |

| Section 30.1 (Representing Categorical Data) and Learning Exercises for Section 30.1 #1 |
| Assignment: Learning Exercises for Section 30.1 #6, 8 |

| Section 30.3 (Examining the Spread of Data) and Learning Exercises for Section 30.3 #2, 3, 7 |
| Assignment: Learning Exercises for Section 30.3 #6, 16, 17 |

| Quiz 9 |

| **Week 14, beginning April 20** |
| Section 30.4 (Measures of Center) and Learning Exercises for Section 30.4 #4, 15, 16 |
| Assignment: Learning Exercises for Section 30.4 #7, 8, 9 |

| Section 30.6 (Examining Distributions) Exclude Discussion 13 |
| Assignment: Learning Exercises for Section 30.6 #4, 11, 14, 16 |
**Week 15, beginning April 27**

In preparation for the final exam review, review all quizzes and exams and bring them to class.

Section 31.2 (Lines of Best Fit and Correlation)
- Assignment: Learning Exercises for Section 31.2 #2, 3, 5
- Assignment: Section 31.4 Check Yourself, all

Section 32.1 (Having Confidence in a Test Statistic) pp. 749-750 and pp. 755-756
- Assignment: Learning Exercises for Section 32.1 #6, 7
- Assignment: Section 32.4 Check Yourself #1, 2

Section 33.1 (Expected Value)
- Assignment: [Supplementary] Learning Exercises for Section 33.1 #3

**Quiz 11**

**Review for Final Exam**

The MATH 201 Final Exam is on Thursday, May 7, 2020 from 8:00 – 9:50 am. Location to be announced.