

## Math 101, Elementary Algebra 2 – Spring 2020

### Contact Information:

Instructor: Nathan Tauber  
Office: Office hours will be held through email  
E-mail: taubern@uwosh.edu

Text: Beginning & Intermediate Algebra, Edition 5 by Miller/O'Neill/Hyde

E-books are included within the Aleks homework system. Physical paper texts may be optionally purchased for a small fee but a physical book is not required.

Office Hours: MTuWF 10:20-11:20, other times by appointment

Due to the closure of our physical campus, office hours will be held in lieu of class time via the internet. I will be sitting at my computer to assist you via email with any questions you may have. If you would like to discuss and work through a problem, please send me an email and I will respond via email or we can work through problems using software such as Collaborate Ultra or Zoom that will enable us to speak online and use a virtual whiteboard. I will also try to respond to other emails between 9am and 5pm throughout the day Monday through Friday but my response will not be as quick as it is during office hours. I cannot guarantee a response to emails received over the weekend or evening until the next time I am at a computer.

Emails: The fastest way to contact me is via email. **If you send me an email, please be sure to include your name and your class section or meeting time.**

Grading: Your final grade is based on a weighting of activities, quizzes and exams as listed below.

<u>Assessment</u>	<u>Points</u>
Quizzes	10%
Aleks Homework	10%
Midterm Exam	30%
Final Exam	50%

<u>Grading Scale:</u>	92-100	A
	90-91	A-
	88-89	B+
	84-87	B
	82-83	B-
	80-81	C+
	75-79	C
	50-74	D
	0-49	F

Aleks: Spending regular time working on homework problems is vital for properly understanding and retaining the information we cover. For homework, we will be utilizing ALEKS. This is an adaptive homework system that will customize your homework questions to your specific needs. You should have received a 20-digit activation code with the purchase of your textbook through the bookstore. If you did not purchase the code in the bookstore, a code can be purchased online using a credit card. Please be sure to purchase the 720-day access code. Please use class code **GU9VN-KX9NG** when signing up for the course. A video showing you how to sign into the Aleks homework system can be viewed at <http://video.mhhe.com/watch/qYN1SRb4hQqVr4KP3s4Mb1>. Once you have signed into the course you will begin an initial assessment in which Aleks attempts to understand your level of mathematical understanding on various concepts. This assessment can last up to 30 questions and may take you up to 2 hours. Please take the assessment seriously as it is in your best interest to allow Aleks to accurately assess your content knowledge. On a daily basis you must be in learn mode to receive credit for the daily homework assignments. To receive credit for the homework all you must do is complete the homework prior to the due date by answering a certain number of questions correctly in a row for each of a series of topics within that section. You will have as many attempts at these problems as is necessary prior to the due date for each section. As long as you are completing the homework on time you will earn 100% for the homework no matter how many incorrect answers you may have had along the way.

When studying for exams you may wish to enter review mode where you can select specific sections in which to work additional homework problems.

While other browsers may be used, Aleks works best when using Google Chrome.

The technical support for phone number for Aleks is **800-258-2374**.

Quizzes and Exams: Quizzes and Exams will be given online using the Aleks homework system.

The topics covered on each quiz are listed in the title of the quiz. Once you feel you understand that material you may complete the quizzes (in order 1-10) as soon as you would like as long as they are completed by their individual due dates. **If you do not complete a quiz prior to its due date your score for that activity is a zero. There will be no make-up quizzes given.** Feel free to work ahead on the homework and quizzes if you feel comfortable with the material.

If I am not contacted prior to exam time and you fail to complete an exam, **your score for that exam will be zero.**

There is a cumulative final exam in Math 101. Typically, in class you are given one hour to complete an exam. Since these exams are online and you will have to enter your answers into the computer, the time limit to complete an exam in this class is now 2 hours. On the two scheduled exam days the exam will become available to you at 8am and will close at noon. You may log in and take your two-hour exam at any point during that four-hour window, but you must be sure that you are finished by noon. If you wait to begin the exam until 11:30, you would only have 30 minutes to complete the exam so please plan appropriately.

When you complete a quiz or exam, your answers will be submitted into the Aleks System. You should also be working the problems out on blank paper, being sure to label which problem you are working out. Once you have completed the quiz or exam you will then take pictures of your work (the pictures should be clear and upright using legible handwriting), one picture for each page of work. You will then attach all these pictures in order in a single original email to me. The subject of the email for a quiz should be "Math 101 Quiz (Quiz Number) (Your Last Name)". For example, I would submit the first quiz using the subject: *Math 101 Quiz 1 Tauber*. For the exams use "Math 101 Midterm Exam (Your Last Name)" for the midterm and "Math 101 Final Exam (Your Last Name)" for the final exam. For example, I would submit my work for the midterm using the subject: *Math 101 Midterm Exam Tauber*. I will use these pictures to assign any partial credit for your quiz or exam. Just as an answer without any work would receive zero points during a typical in-class quiz or exam, if you fail to send me work for a problem you will not receive any points for that problem. **These pictures of your work should be sent within one hour of you completing the quiz or exam.** Please be sure you are sending an original email and not replying to an existing email when you submit your work (definitely not using Reply All). **Do not dispose of any of your work until the end of the course.**

Calculator: The CalcPal EAI-90 is the required calculator for Math 101. This calculator is available in the campus bookstore and online. This is the only calculator that will be allowed during quizzes and exams. I understand the desire to use a more powerful calculator, however this calculator policy is in place in Math 101 so that you will have an easier time once you move into Math 103.

Tutoring: Please seek help as soon as you find you are having difficulty with the material. Do not wait. If you cannot make it to my virtual office hours you may contact me and set up a time outside of those hours to collaborate using virtual software. Due to the closure of campus the free walk-in tutor lab located in Swart 301 will be closed throughout the semester.

Learning Objectives: This course provides an introduction to algebra, focused on critical thinking, problem solving and the communication of ideas to help students prepare for future coursework and future problem-solving opportunities.

Upon successful completion of the course, students are expected to have the ability to complete the following:

- Students will utilize basic concepts about the real number system, fundamental operations of arithmetic, simplifying or evaluating algebraic expressions, solving algebraic equations, properties and rules of exponents, adding, subtracting and multiplying polynomials, dividing a polynomial by a monomial, factoring polynomials, simplifying and evaluating rational expressions and solving rational equations.
- Students will utilize precise language regarding exponents including base, exponent, power, and reciprocal.
- Students will simplify exponential expressions and solve exponential equations utilizing the product rule, the quotient rule, the expanded power rule and the negative rule of exponents proficiently.
- Students will factor trinomials by grouping, simplify rational expressions and solve rational equations.
- Students will solve application exercises through a logical and sequential process that emphasizes preparing a plan of action, creating an equation, solving the equation, answering the original question including the correct units, checking that the answer is a plausible real number solution and rejecting non-plausible real number solutions such as negative distances, and/or extraneous solutions.

## TENTATIVE SCHEDULE

### March

30	Monday	Read Syllabus, Log into Aleks, Aleks Tutorials, Take Initial Assessment	
31	Tuesday	Section 4.1	Solving Linear Systems by Graphing <i>due 4/1</i>

### April

1	Wednesday	Section 4.2	Solving Linear Systems by Substitution <i>due 4/3</i>
3	Friday	Section 4.3	Solving Linear Systems by Addition <i>due 4/6</i>

#### **Quiz 1 Covering Sections 4.1, 4.2, and 4.3 due Monday, April 6**

6	Monday	Section 4.4	Applications of Systems of Eq. in 2 Variables
7	Tuesday	Section 4.4	Applications of Systems of Eq. in 2 Variables <i>due 4/8</i>

#### **Quiz 2 Covering Section 4.4 due Wednesday, April 8**

8	Wednesday	Section 5.1	Product and Quotient Rules for Exponents <i>due 4/10</i>
10	Friday	Section 5.2	More Properties of Exponents <i>due 4/13</i>
13	Monday	Section 5.3	Zero and Negative Exponents <i>due 4/14</i>

#### **Quiz 3 Covering Sections 5.1, 5.2, and 5.3 due Tuesday, April 14**

14	Tuesday	Section 5.4	Scientific Notation <i>due 4/15</i>
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#### **Quiz 4 Covering Section 5.4 due Wednesday, April 15**

15	Wednesday	REVIEW	
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17	Friday	<b>MIDTERM EXAM</b>	<b>Complete by Noon on Friday, April 17</b>
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20	Monday	Section 5.5	Addition and Subtraction of Polynomials <i>due 4/21</i>
21	Tuesday	Section 5.6	Multiplication of Polynomials and Special Products <i>due 4/22</i>

#### **Quiz 5 Covering Sections 5.5 and 5.6 due Wednesday, April 22**

22	Wednesday	Section 5.7	Division of Polynomials <i>due 4/24</i>
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#### **Quiz 6 Covering Section 5.7 due Monday, April 24**

24	Friday	Section 6.1	Greatest Common Factor and Factoring by Grouping
27	Monday	Section 6.1	Greatest Common Factor and Factoring by Grouping <i>due 4/28</i>
28	Tuesday	Section 6.2	Factoring $x^2+bx+c$ <i>due 4/29</i>

#### **Quiz 7 Covering Sections 6.1 and 6.2 due Wednesday, April 29**

29	Wednesday	Section 6.3	Factoring by Trial and Error <i>due 5/4</i>
		Section 6.4	Factoring Trinomials Using the ac Method

### May

1	Friday	Section 6.4	Factoring Trinomials Using the ac Method <i>due 5/4</i>
4	Monday	Section 6.5	Difference of Squares and Perfect Squares <i>due 5/5</i>

#### **Quiz 8 Covering Sections 6.3, 6.4, and 6.5 due Tuesday, May 5**

5	Tuesday	Section 6.7	Solving Equations using the Zero Product Rule <i>due 5/6</i>
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#### **Quiz 9 Covering Section 6.7 due Wednesday, May 6**

6	Wednesday	Section 6.8	Applications of Quadratic Equations
8	Friday	Section 6.8	Applications of Quadratic Equations <i>due 5/11</i>

#### **Quiz 10 Covering Section 6.8 due Monday, May 11**

11	Monday	REVIEW	
12	Tuesday	REVIEW	

13	Wednesday	<b>FINAL EXAM</b>	<b>Complete by Noon on Wednesday, May 13</b>
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15	Friday	NO CLASS	
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