## University of Wisconsin Oshkosh FDL Campus Spring 2020 Math 100-104C Syllabus MoTuWeTh 11:30am – 12:30pm, C 112

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Office Hrs: MoTuWeTh 1:30 am-3:00 pm, and by Appointment.

# Course Information

Introduction to Algebra course is a math course that covers algebra concepts, focused on critical thinking, problem solving and the communication of ideas to help students prepare for future coursework and future problem solving opportunities.

ALEKS CODE: WD9AX-CN449

### **Prerequisite**

Based on placement test score.

## Required Materials

ALEKS access (Sold at the bookstore, with the e-book included)

Beginning and Intermediate Algebra McGraw-Hill 5th Edition by Miller, O'Neill, and Hyde (The e-book is included with purchase of the ALEKS program code. An optional hard copy textbook is also available for purchase.)

Notebook for working through problems on ALEKS (Even though the problems are on-line, I strongly recommend that you work them out on paper and pencil, then enter your answer on-line. If you keep your work organized in a notebook, it will also serve as a valuable reference.)

A calculator will be needed on some in-class written exams and quizzes. If permitted, a scientific calculator is allowed (e.g., TI-30XIIS, TI-30XS, TI-36X Pro). No cell phone, or other electronic device will be allowed.

#### **AIEKS**

ALEKS stands for **Assessment and Learning in Knowledge Spaces**. ALEKS is an on-line homework system for mathematics. We will use ALEKS for homework this semester. ALEKS is an adaptive homework system that does not use multiple choice. You will need to work out the problems on pencil and paper before submitting answers on the computer. One great advantage of an on-line homework system is that you have immediate feedback. ALEKS, in particular, is adaptive, so if you struggle with a particular topic, you will be asked to complete more questions related to that topic. That means that if you are already comfortable with a specific topic, you will not be forced to do a lot of "busy-work," but if you need more practice, you will get it. However, please be warned to take your homework and knowledge checks on ALEKS seriously. If you are careless, you may have to do a large number of additional questions to convince ALEKS that you know the material. We will use "ALEKS" in this course for the majority of your homework.

Once you have acquired the ALEKS license via the bundle, go to **www.aleks.com**, and enter the Code: **WD9AX-CN449** 

You will be required to take the Initial Knowledge Check. Please finish this assessment as soon as possible and start homework for chapter 1. It is important that you do your best, answer questions as accurately by yourself, without the aid of others, in order for ALEKS to properly gauge your skills so that you will have the best possible experience with the programs.

An advantage of an online homework system is instantaneous feedback. Problems come from specific topics that are divided up by section of the textbook.

Credit for a topic is awarded when enough problems are correctly solved. This is determined by ALEKS and is based on each individual's readiness for progression. Instead of solving a problem there is an option to see an explanation of the solution. However, this will not count toward completing a topic. Topics that are not complete in time to receive credit for the assignment are revisited at the end of each chapter. This provides another chance at that topic.

Review problems are available in ALEKS. ALEKS makes the following available: a grade book, a progress report, a time line, and an ALEKS Pie which shows both the number of topics that have been completed as well as a number that are remaining.

Even though ALEKS is online, every problem needs to be worked out by hand with paper and pencil. Students are encourage to have a dedicated notebook for their ALEKS assignments. Their notes will be useful for completing similar problems or when seeking aid from the instructor or a tutor.

**ALEKS Customer Support** 

For ALEKS Customer Support (800) 258 2374 , or use the on-line contact at www.aleks.com

## Course Content Objectives

This course is intended to cover the following objectives for this course are listed below (see calendar for detailed schedule)

- > Students will study basic concepts about the real number sets including natural numbers, whole numbers, integers, rational numbers and irrational numbers.
- Students will utilize fundamental operations of arithmetic, order of operations, inequalities, simplifying or evaluating algebraic expressions, simplifying ratios, solving proportions and solving algebraic equations.
- Students will utilize precise language regarding fractions including numerator, denominator, lowest common denominator, greatest common factor and reciprocal.
- Students will utilize addition, subtraction, multiplication and division of fractions proficiently.
- > Students will study expressions that contain fractions and solve algebraic equations that contain fractions.
- > Students will utilize information related to linear equations in the representations of equations, tables and graphs.

- Students will solve application exercises using equations, 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.
- > Students will utilize the graph of a linear equation and create a linear equation given the coordinates of two points.
- > Students will study the slope of a linear equation and the x and y intercepts.

## **Grade Policy**

> Your grade in MATH 100 will be determined according to the following:

MATH 100 grade		
ALEKS Homework	10	
Quizzes	20	
Exam 1	20	
Exam 2	20	
Final Exam	30	
Total		

Grading Scale: Standard grading scale is used where scoring above 93% is an A, 90-92% is an A-, 87-89% is a B+, 83-86% is a B, 80-82% is a B, 77-79% is C+, 73-76% is a C, 70-72% is a C-, 67-69% is a D+, 63-66% is a D, 60-62% is a D-, and below 60% is an F.

**Make-ups for the missed exams** will be available only in very special cases. If you expect to miss a scheduled test due to extenuating circumstances and expect to get any consideration with respect to a make-up, I should be notified at least 24-hours in advance.

#### Quizzes:

Quizzes are brief in-class quizzes designed to check understanding of textbook/ lessons, workbook exercises and classroom topics. These quizzes may be administered one-on-one or in a group. **There will be NO make-ups on quizzes.** 

## **Semester Tentative Calendar for Math 100-104C Course Spring 2020**

Week	Monday	Tuesday	Wednesday	Thursday
1	Feb 3: <b>ALEKS</b> , <b>1.4</b>	Feb 4: <b>1.5</b>	Feb 5: <b>1.6</b>	Feb 6: <b>1.1</b>
2	Feb 10: <b>1.2</b>	Feb 11: <b>1.3</b>	Feb 12: <b>1.7</b>	Feb 13: <b>Review</b>
3	Feb 17: <b>Exam 1</b>	Feb 18: <b>2.1</b>	Feb 19: <b>2.2</b>	Feb 20: <b>2.3</b>
4	Feb 24: <b>2.4</b>	Feb 25: <b>2.5</b>	Feb 26: <b>2.6</b>	Feb 27: <b>2.7</b>
5	Mar 2 : <b>Review</b>	Mar 3: Exam 2	Mar 4: <b>3.1</b>	Mar 5: <b>3.2</b>
6	Mar 9: <b>3.3</b>	Mar 10: <b>3.4</b>	Mar:11 3.5	Mar 12: <b>3.6</b>
7	Mar 16: Review	Mar 17: Final Exam	Mar 18: Final Exam Review	Mar 19: No Class

### **Cumulative Final Exam – Mar 17**

**NOTE:** This timetable is tentative and could be updated during the semester. Updates will be announced in class