

## **Math 103, Intermediate Algebra –Spring Semester 2020**

Section 011 TTh. 1:20-2:50 Swart Hall 2, ALEKS CODE: AP3VU-UFNRK

Section 015 TTh. 3:00-4:30 Swart Hall 2, ALEKS CODE: TUE6T-4NKND

### **Contact Information:**

Instructor: Francisca Fernández  
Office: Swart 241  
E-mail: [fernandf@uwosh.edu](mailto:fernandf@uwosh.edu)

**Office Hours:** TTh. 12:15-1:15 p.m. or by appointment.

**Text:** Beginning & Intermediate Algebra (720 Day ALEKS Access Card w/Ebook) 5th Edition.

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

<u>Assessment</u>	<u>Points</u>
In Class Activities	15%
Assignments in ALEKS	10%
Attendance	5 %
Exams (2)	20% each
Final Exam	30%

### **Grading scale:**

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

**Learning outcomes for Math 103 Intermediate Algebra (3 credits)**

Functions, tables and graphs, problem solving, inequalities in one variable, exponents and radicals, quadratic functions and exponential functions. This course does not count towards the 120 units credits (crs.) necessary for graduation. Prerequisites: Mathematics 101 with a C or better or placement. Not open to students who have completed Mathematics 104 or higher. (Fall-Spring)

**Topic Coverage**

Book: *Beginning & Intermediate Algebra* by Miller, O'Neill and Hyde, Fifth Edition, McGraw-Hill

- 7.1 Intro to Rational Exponents
- 7.2 Multiplying and Dividing Rational Expressions
- 7.3 Least Common Denominator
- 7.4 Adding and Subtracting Rational Expressions
- 7.5 Complex Fractions
- 7.6 Rational Equations
- 7.7 Applications of Rational Equations and Proportions
- 8.1 Introduction to Relations
- 8.2 Introduction to Functions
- 8.3 Graphs of Functions
- 8.4 Algebra of Functions and Composition
- 10.1 Definition of an  $n$ th root
- 10.2 Rational Exponents
- 10.3 Simplifying Radical Expressions
- 10.4 Addition and Subtraction of Radicals
- 10.5 Multiplication of Radicals
- 10.7 Solving Radical Equations
- 11.1 Square Root Property and Completing the Square
- 11.2 Quadratic Formula
- 11.4 Graphs of Quadratic Functions
- 11.5 Applications of Quadratic Functions
- 12.1 Inverse Functions
- 12.2 Exponential Functions
- 12.3 Logarithmic Functions
- 12.4 Properties of Logarithms
- 12.5 The Irrational Number  $e$  and change of Base
- 12.6 Exponential or Logarithmic Equations

## Suggested Course Schedule

Days	Topic
Tue; Feb 4 <sup>th</sup>	Welcome; Aleks; 7.1
Thu; Feb 6 <sup>th</sup>	Sec: 7.2 – 7.3
Tue; Feb 11 <sup>th</sup>	Sec 7.3 – 7.4
Thu; Feb 13 <sup>th</sup>	Sec 7.5 – 7.6
Tue; Feb 18 <sup>th</sup>	Sec 7.6 – 7.7
Thu; Feb 20 <sup>th</sup>	Sec 7.7 – 8.1
Tue; Feb 25 <sup>th</sup>	Sec: 8.1 – 8.2
Thu; Feb 27 <sup>th</sup>	Sec: 8.2 – 8.3
Tue; Mar 3 <sup>rd</sup>	Sec: 8.3 – Review
<b>Thu, Mar 5<sup>th</sup></b>	<b>Review-Exam 1</b>
Tue; Mar 10 <sup>th</sup>	Sec: 10.1 – 10.2
Thu; Mar 12 <sup>th</sup>	Sec: 10.2 – 10.3
Tue; Mar 17 <sup>th</sup>	Sec: 10.3 – 10.4
Thu; Mar 19 <sup>th</sup>	Sec 10.4 – 10.5
Sun; Mar 22 <sup>nd</sup> – Sun; Mar 29 <sup>th</sup>	Spring Break
Tue; Mar 31 <sup>st</sup>	Sec 10.5 – 10.7
Thu; Apr 2 <sup>nd</sup>	Sec 10.7 – 11.1
Tue; Apr 7 <sup>th</sup>	Sec: 11.2 – 11.4
Thu; Apr 9 <sup>th</sup>	Sec: 11.4 – 11.5
Tue; Apr 14 <sup>th</sup>	Sec: 11.5 – Review
<b>Thu, Apr 16<sup>th</sup></b>	<b>Review-Exam 2</b>
Tue; Apr 21 <sup>st</sup>	Sec: 8.4 – 12.1
Thu; Apr 23 <sup>rd</sup>	Sec: 12.1 – 12.2
Tue; Apr 28 <sup>th</sup>	Sec: 12.2 – 12.3
Thu; Apr 30 <sup>th</sup>	Sec: 12.3 – 12.4
Tue; May 5 <sup>th</sup>	Sec: 12.4 – 12.5
Thu; May 7 <sup>th</sup>	Sec: 12.5 – 12.6
Tue; May 12 <sup>th</sup>	12.6 – Review
<b>Thu, May 13<sup>th</sup></b>	<b>Comprehensive Final Exam</b>

Please note that exams are designed to be administered in one hour. Instructors cannot extend exam times for a student unless that student has a written learning disability accommodation from the Dean of Students Office or Project Success.

**Homework:** Timely completion of all homework can provide a useful study tool for quizzes and exams. Invest your time in complete solutions that you can review at a later date as preparation for quizzes and exams.

**In Class Activities:** You will receive points for participating in the “in class activity” classroom exercises. Possible “in class activities” may include group activities, unannounced homework quizzes or collection of homework. Unannounced homework quizzes consist of problems from previously assigned topics. If you are absent for any reason on the day of an in-class activity, your score for that activity is a zero. There will be no make-up activities given.

**Attendance:** In order to receive the 5% towards the final grade, students must attend class every day. One unexcused missed class will lower the grade by one point. Two unexcused missed classes will lower the grade by two points. A student with three or more unexcused missed classes will receive a zero in this category.

**Exams:** If I am not contacted prior to exam time and you are absent for an exam, your score for that exam will be zero.

**Math Lab:** The Swart 301 Developmental Math Lab provides free walk-in tutoring for Math 103 students. The Swart 301 tutoring schedule is posted at <http://www.uwosh.edu/mathematics/developmental-mathematics>. Students are strongly encouraged to actively solve all suggested exercises and to use the Swart 301 lab as a resource for assistance with any questions generated while completing homework assignments.

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The Dean of Students Office (DOS) helps students in navigating the university, particularly during difficult situations, such as personal, financial, medical, and/or family crises. DOS assists students with Out of Class Letters to faculty, Late Withdrawals/Drop for personal or medical issues, advocacy, and coordinates care for students through the Student Care Team. Please visit <http://www.uwosh.edu/deanofstudents>.

**Attendance:** Students are expected to attend each class and to remain for the duration. Coming 15 minutes late or leaving 15 minutes early constitutes an absence for the student.

Students who miss class due to illness or other significant personal reasons are encouraged to complete the Out of Class Letter Process through the Dean of Students Office (Dempsey, Room 125). After the instructor receives notification from the Dean of Students office it will be up to the instructor's discretion to excuse the absence. Three absences for any reason, whether excused or not, may constitute failure for the course. Please visit <http://www.uwosh.edu/deanofstudents> for additional information.

**Attitude:** A professional and academic attitude is expected throughout this course. Measurable examples of non-academic or unprofessional attitude include but are not limited to: talking to others when the instructor is speaking, mocking another's opinion, cell phones ringing, emailing, texting, or using the internet whether on a phone or computer. If any issues arise a student may be asked to leave the classroom. The professor will work with the Dean of Students Office to navigate such student issues.

**Cell Phones/On Call:** If you bring a cell phone to class it must be off or set to a silent mode. Should you need to answer a call during class, students must leave the room in an undistruptive manner. Out of respect to fellow students and the professor, texting is never allowable in class. If you are required to be on call as part of your job, please advise me at the start of the course.