Math 103 – Algebra Methods and Introduction to Functions – Summer 2020
Section 3 – MoTuWeThFr – 3:00-4:50pm
(INFORMATION GIVEN BELOW IS SUBJECT TO CHANGE)

Instructor: Justin Eld  Office Hours: Found on Blackboard
Office: Neill 129  E-mail: justin_eld@wsu.edu
Course Web Site: learn.wsu.edu (BlackBoard)

♦ Required Supplement: ALEKS Student Access Code
   (Packaged with book at the Bookie or purchase separately online at ALEKS.com)
♦ Provides on-line help in the form of written explanations and video instruction clips
♦ Offers 24 Hour Unlimited Online Access
♦ http://www.aleks.com. This website is a primary learning tool that will facilitate your practice
   with the fundamental concepts you are learning.
♦ Your Class Code: MYHMQ-GLDDT
♦ Two Week Temporary Financial Aid Access Code: 0B6BA-C1676-DC6EB-4D2D8

Note: The Temporary Financial Aid Access Code does not add an additional two weeks to your account.

COURSE DESCRIPTION: We will be working primarily with fractions, rational expressions, exponential
expressions, radical expressions, and factoring. By the end of the course you should understand and be able to
solve simple problems and equations containing these expressions. These are the basics that will be used in later
classes such as precalculus, calculus, economics, physics, biology, and engineering.

LEARNING OUTCOMES: You will develop learning skills that are important for your success in this course,
other courses you will be taking during your undergraduate studies, and lifelong learning. In particular, at the end
of this course you will be able to:
• Use properties of real numbers and properties of exponents to add, subtract, multiply, divide, and simplify
  expressions.
• Recognize the difference between an algebraic expression and an algebraic equation, and use this
  information to construct expressions from the context of a real-life situation.
• Analyze a real-life situation and convert it into an appropriate mathematical statement.
• Solve linear inequalities; linear, quadratic, rational, and radical equations.
• Use properties of real numbers and properties of exponents to manipulate and simplify rational
  expressions and solve simple rational equations.
• Determine slopes of lines, parallel lines, and perpendicular lines.
• Use properties of real numbers and properties of exponents to manipulate and simplify exponential
  expressions.
• Use properties of real numbers, properties of radicals, and properties of exponents to simplify radical
  expressions and solve simple radical equations.
• Add, subtract, and multiply polynomial expressions.
• Use properties of real numbers and properties of exponents to factor polynomial expressions.
• Solve simple polynomial equations and simple absolute value equations and inequalities.
• Set up equations to represent data given an application problem and use it to solve for a specific outcome.
• Use the methods of substitution and elimination to solve systems of linear equations.

Each of the above learning outcomes will be evaluated by online homework assignments, group activities, and
exam questions.
Grading: Your overall grade in this course is based on the following point system.

<table>
<thead>
<tr>
<th>ASSIGNMENT</th>
<th>POINTS</th>
<th>~%</th>
</tr>
</thead>
<tbody>
<tr>
<td>ALEKS Modules: 22 @ 5 points each (drop lowest 2)</td>
<td>100</td>
<td>22%</td>
</tr>
<tr>
<td>Two mid-term Exams @ 100 points each</td>
<td>200</td>
<td>44%</td>
</tr>
<tr>
<td>Comprehensive Final Exam</td>
<td>150</td>
<td>33%</td>
</tr>
<tr>
<td><strong>TOTALS</strong></td>
<td><strong>450</strong></td>
<td><strong>100%</strong></td>
</tr>
</tbody>
</table>

**Grading Scale**

<table>
<thead>
<tr>
<th>Passing Grades</th>
<th>Grades Requiring a Course Repeat</th>
</tr>
</thead>
<tbody>
<tr>
<td>93% – 100%</td>
<td>A</td>
</tr>
<tr>
<td>90% – 92.99%</td>
<td>A-</td>
</tr>
<tr>
<td>87% – 89.99%</td>
<td>B+</td>
</tr>
<tr>
<td>83% – 86.99%</td>
<td>B</td>
</tr>
<tr>
<td>80% – 82.99%</td>
<td>B-</td>
</tr>
<tr>
<td>77% – 79.99%</td>
<td>C+</td>
</tr>
<tr>
<td><strong>73% – 76.99%</strong></td>
<td>C</td>
</tr>
</tbody>
</table>

**To earn a C or better, you must have 73% or better on at least 2 exams (this includes the Final Exam)**

ACADEMIC INTEGRITY: Please note that we take the university’s policy on the need for academic honesty in all your work extremely seriously. Any form of dishonesty on an assignment or exam will lead to a zero on the assignment or exam and we reserve the right to give a grade of F for the course as well. If needed, the case will be referred to the Office of Student Standards and Accountability. Visit the following site for more information regarding what constitutes academic dishonesty and the WSU procedures for handling cases of academic dishonesty. [http://conduct.wsu.edu/academic-integrity-policies-and-resources](http://conduct.wsu.edu/academic-integrity-policies-and-resources).

ELECTRONIC DEVICES: Personal computers, cell phones (this means no texting during class), blackberries, iPods, mp3 players, CD players, and similar devices may not be used during class. Recording of this class is not allowed in any form without direct permission from the instructor. Anyone caught ignoring this policy will be asked to leave the classroom at the discretion of the instructor.

IMPORTANT-What to expect from the class and how to approach it: This class is challenging and will take hard work on your part. As your instructor, I will also work very hard to make the best use of class time, to support you in office hours, and to provide a structure for the class that supports your learning. However, in the end, whether or not you succeed depends on the attitude you bring to class and the effort you put forth.

The only way to learn and retain mathematics (you will be using this material in later courses) is through lots of practice working with the concepts and reflecting on the processes used and underlying structure. Class time will be spent highlighting key topics, making connections between prior knowledge and new concepts, and working through examples that illustrate important ideas. Most of the learning and practice working with the concepts will happen through the on-line learning environment called ALEKS. At least two-thirds of your time outside of class should be spent working on your ALEKS Modules. To learn the material, you will need to be diligent about working daily on the Modules. See the additional handouts for more detailed information and log on directions for ALEKS.

CLASS PARTICIPATION/ATTENDANCE: You are expected to attend and actively participate in each and every scheduled class period. Reading assigned materials prior to each class, taking good notes during class, asking relevant questions, and working through activities both independently and in consultation with your classmates are just a few ways you can actively participate in class.
ALEKS INITIAL KNOWLEDGE CHECK: After you have signed into ALEKS and completed a tutorial, you will automatically be given an initial knowledge check to determine appropriate program level. It is important that you take this knowledge check seriously. Do your best to answer all questions without assistance and without using additional resources. ALEKS will use the results of your knowledge check to set individual practice based on what you can and cannot do. Be sure to read the ALEKS Information sheet included at the end of the syllabus for complete login instructions and tips for using ALEKS successfully.

ALEKS MODULES: You are expected to master the topics in the 22 ALEKS modules. Progress in ALEKS is critical to your learning and success. Modules are due almost every single day. The two lowest modules will be dropped. Points will be awarded based on following table:

<table>
<thead>
<tr>
<th>Percent Complete</th>
<th>Points Awarded</th>
<th>Percent Complete</th>
<th>Points Awarded</th>
</tr>
</thead>
<tbody>
<tr>
<td>100%</td>
<td>5</td>
<td>80%</td>
<td>4</td>
</tr>
<tr>
<td>95%</td>
<td>4.75</td>
<td>75%</td>
<td>3.75</td>
</tr>
<tr>
<td>90%</td>
<td>4.5</td>
<td>70%</td>
<td>3.5</td>
</tr>
<tr>
<td>85%</td>
<td>4.25</td>
<td>Less than 70%</td>
<td>0</td>
</tr>
</tbody>
</table>

See the Calendar inside ALEKS itself for specific due dates.

While ALEKS is an on-line learning environment, you should work the problems using pencil and paper. Maintain a notebook in the spirit of a lab notebook. Your notebook serves as an organizational tool and memory aid and should be used specifically to record your ALEKS work. Each day when you work on ALEKS, date your work, record the topic you are working on, solve the exercise in the notebook, and record any important information you need to recall or might want to reference later. This notebook is also a good place to record questions about topics for which you may need to seek additional help to understand. The neater and more organized your work is, the better a resource it will be when you prepare for the exams.

- Please read the ALEKS information sheet for more information. It includes the course code you need to sign up.

EXAMS: There will be two written (online) mid-term exams (100 points each), and a written (online) comprehensive final exam (150 points). Final Exams cannot be given early. Make-up exams are given only in extremely rare cases. If you have to miss an exam for any reason, you must notify me as soon as possible prior to the exam so I can determine if a make-up exam is applicable. Please note that make-up exams are typically more difficult than the original exam. Calculators are not allowed on exams. Because of this, it would be in your best interest to get accustomed to doing in-class work and homework without a calculator. Do not be dependent on your calculator. Make sure to bring your student ID, pencils and an eraser to each exam. Please note the dates for the exams on the course calendar.

CORRESPONDENCE: When communicating with your instructor (for this or any class) keep in mind that this is essentially a professional relationship. Please use complete sentences, proper capitalization, and proper punctuation. Please use the email address given at beginning of this document.

STUDY ASSISTANCE: There are many opportunities on campus to get help including the following. Why struggle? Successful students make use of available resources, so don't struggle when help is just a few steps away! We want you to succeed, we're here for you, and we have FREE tutoring available in the Math Learning Center (Cleveland 130) and the computing lab in Thompson Hall (Room 1). Check it out!

- Cleveland 130 (Information for Online Tutors will be posted soon.)
- For more information please go to: http://www.math.wsu.edu/studyhalls/welcome.php
- My office hours!!! I am here to help you. It is my goal to see you succeed in this class.

Make use of these options – we want you to be successful. Also, forming study groups and meeting to review assignments is helpful.
WSU SAFETY MEASURES: Washington State University is committed to enhancing the safety of students, faculty, staff, and visitors to the Pullman campus. It is highly recommended that you review the Campus Safety Plan posted at [http://safetyplan.wsu.edu](http://safetyplan.wsu.edu). Also, visit the Office of Emergency Management web site at [http://oem.wsu.edu](http://oem.wsu.edu) for a comprehensive listing of university policies, procedures, statistics, and information related to campus safety, emergency management, and health and welfare of the campus community.

STUDENTS WITH DISABILITIES: Reasonable accommodations are available for students with a documented disability. If you have a disability and may need accommodations to fully participate in this class, please visit the Access Center. All accommodations MUST be approved through the Access Center (Washington Building, Room 217). Please stop by or call 509-335-3417 to make an appointment with an Access Advisor. For more information contact a Disability Specialist at [http://accesscenter.wsu.edu](http://accesscenter.wsu.edu) or Access.Center@wsu.edu.

Accommodation for Religious Observances or Activities:
Washington State University reasonably accommodates absences allowing for students to take holidays for reasons of faith or conscience or organized activities conducted under the auspices of a religious denomination, church, or religious organization. Reasonable accommodation requires the student to coordinate with the instructor on scheduling examinations or other activities necessary for course completion. Students requesting accommodation must provide written notification within the first two weeks of the beginning of the course and include specific dates for absences. Approved accommodations for absences will not adversely impact student grades. Absence from classes or examinations for religious reasons does not relieve students from responsibility for any part of the course work required during the period of absence. Students who feel they have been treated unfairly in terms of this accommodation may refer to Academic Regulation 104 – Academic Complaint Procedures.

The following table clarifies the different levels of mathematical understanding that lead to success in mathematics. Your goal in Math 103 is to reach Level 4.

### Levels of Mathematical Understanding**

<table>
<thead>
<tr>
<th>Level</th>
<th>Description</th>
<th>Status</th>
</tr>
</thead>
<tbody>
<tr>
<td>Level 1</td>
<td>Watch someone else work through a problem and follow along.</td>
<td>Ready to learn</td>
</tr>
<tr>
<td>Level 2</td>
<td>Solve a problem similar to a solution shown worked out in the book or class notes.</td>
<td>Beginning to understand</td>
</tr>
<tr>
<td>Level 3</td>
<td>Look at a problem and recognize the methods which could be useful. Solve the problem without reference to notes or book.</td>
<td>Minimal understanding</td>
</tr>
<tr>
<td>Level 4</td>
<td>Solve a problem (Level 3) and clearly explain the solution to a friend.</td>
<td>Understands mathematics at an acceptable level</td>
</tr>
</tbody>
</table>

**Developed by Dr. Sandra C. Cooper, Washington State University**
ALEKS Information Sheet

A significant amount of learning for this course will happen through the web-based, artificially intelligent, educational software called ALEKS (www.aleks.com). The ALEKS program has several features that should enhance your learning and contribute to your success in pre-calculus. These features include:

- clear explanations and immediate feedback
- on-line help in the form of written explanations and video instruction clips

In addition, the software will

- help you develop precision and accuracy when solving problems
- give you the opportunity to practice as much as needed to master a concept
- periodically assess your mastery of topics to insure you are retaining what you are learning

ALEKS has been shown to increase student success rates in College Algebra. Use it to its full capacity!

Signing Up

Purchase your ALEKS Student Access Code from the website www.aleks.com or from the Bookie. To enter the course, click the link SIGN UP NOW and enter your Student Access Code and the class code.

- Your Class Code: MYHMQ-GLDDT
- Two Week Temporary Access Code: 0B6BA-C1676-DC6EB-4D2D8

This temporary access code does not add an additional two weeks to your account.

Fill out your personal information including your WSU student ID number to ensure that you receive credit for your work.

Initial Knowledge Check

Much of the learning you do over the semester will happen through the guided practice ALEKS provides. It will give you questions on material you are ready to learn. An important first step in that process is this initial knowledge check. Here are a few guidelines to follow:

Tips for a Successful Knowledge Check

- Solve all problems without assistance
- Maintain an “ALEKS notebook” to record your work as you solve problems.
- Work problems carefully in your notebook, clearly showing the steps you used.
- Enter only your final answer into ALEKS.
- Use a calculator only when the ALEKS calculator is given.
- Don't worry if you get a problem that is unfamiliar or that is too difficult. This is normal. Just click on "I don't know" and move on.
- Only click, "I don't know," if you really don't know how to solve a problem. Try your best to solve any problems that you think you might be able to solve.
- Never rush through an knowledge check. If you are out of time, just close the ALEKS window. When you log on again later, ALEKS will bring you to the point at which you left off.
Completing ALEKS Modules:
Once you have completed the initial knowledge check, you will be guided through the procedures for completing your content modules. Once you have answered a few questions correctly without help, ALEKS will mark that topic as completed and you can move on to another topic. If you have difficulty solving a problem and become frustrated, go back to the content tab at the top of the page and choose something else; you can always return to a topic.

Automatic Knowledge Checks
Automatic knowledge checks are an important feature of how ALEKS works as your personal learning guide. ALEKS is designed to present you with material you are ready to learn and so it keeps track of your current knowledge. The knowledge checks consist of 15-35 questions. In the newest versions of ALEKS courses, the scope of knowledge checks have been made more sensitive to your history, so that questions will tend to focus on material that is most relevant to your current progress. This enables ALEKS to keep the knowledge checks even shorter and to integrate them more smoothly into your continued progress. The progress knowledge checks should be taken very seriously. They help you identify topics that might need additional review as well as topics you know and may skip.

Requested Knowledge Checks
Your instructor reserves the right to request a proctored knowledge check for you personally, or for everyone in the course.

***ALEKS Notebook***
The ALEKS exercises are given on-line and you submit your answers on-line, but you will need to use pencil and paper to solve them. Purchase a notebook to be used exclusively for your ALEKS work. Each time you work on ALEKS, whether it is learning mode or a knowledge check, date your work, write down the topic name, and carefully organize your calculations. Do not use your notebook as simply scratch paper. If you take care to organize your work and carefully write your steps your ALEKS notebook will be a useful resource later as you study for exams and review material. Maintaining a notebook will build a better understanding and will help you develop useful learning skills.

ALEKS Technical Support (Higher Education)
Visit http://www.aleks.com/support/contact_suppor
FAQs: Click on FAQs to view a list of Frequently Asked Questions
Online Guide: Click on User Guide to view the online guide
Troubleshooting: Click on Troubleshooting to view the status of your computer and more

Hours (Eastern Time):
Sunday, 4:00 PM to 1:00 AM
Monday - Thursday, 7:00 AM to 1:00 AM
Friday, 7:00 AM to 9:00 PM

Email: contact ALEKS customer service at http://support.aleks.com
Telephone: (714) 619-7090
Fax: (714) 245-7190