Math 106 Syllabus – Summer 2020
College Algebra – Section 02

(Informatin subject to change)

Instructor: Tariq Alsmadi
Office: Neill 304
E-mail: tariq.alsmadi@wsu.edu

Office Hours:
Mon, Tue, Thu, Fri 10:15 - 11:15
Or by appointment in case of time conflict
Via Zoom

Class Times and Location: 9:00 - 10:15 (Pacific) over zoom

Meeting information available in Blackboard
For technical support with WSU conference rooms, contact your local IT team.
For support or feature requests, please go to https://its.wsu.edu/wsu-video-conferencing-services/

Course Websites:
Blackboard: www.learn.wsu.edu
ALEKS: www.aleks.com
Announcements, assignments and course documents will be posted on Blackboard. Check often.

Credits: 3 credits for Math 106
Prerequisites: A score of at least 70% in the WSU Mathematics Placement Assessment or a grade of C or better in Math 103.

Required Text and Supplements:
ALEKS 360 access code & interactive eBook (8 or 12 week), sold at the Bookie or online at www.aleks.com. If you already have an ALEKS account, but not ALEKS360, you can upgrade. To quote an ALEKS rep “Students who purchased ALEKS access (without an eBook) can upgrade to the eBook version using the online purchase link inside ALEKS.”

Optional Course Materials:
Textbook: College Algebra and Trigonometry custom package, by Julie Miller- Published by McGraw Hill.
ISBN: 9781259957697. Text is available in print or digital. (An online textbook is included when you purchase an ALEKS 360 access code.)

Course Description: We will be working with polynomial, rational, exponential, and logarithmic functions. For each class of functions, we will study the domains, ranges, graphs, special properties, and applications. By the end of the course you should understand their properties, the shape of their graphs, and to be able to solve problems and equations involving them. These are the functions that will be used in later classes such as calculus, physics, biology, and engineering.
Course Goals: 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, you will learn to:

- Understand and apply quantitative principles and methods to define, analyze, and solve problems.
- Integrate and synthesize knowledge and different techniques to solve problems.
- Draw conclusions from computational and symbolic representations in order to check the logic and validity of statements and models.
- Clearly communicate your reasoning and findings.

Learning Outcomes: At the end of this course, you should be able to do the following.

- Use properties of real numbers and properties of exponents to manipulate and simplify mathematical expressions; know how to factor and simplify polynomials, and simplify rational expressions.
- Solve: linear equations and inequalities; absolute value equations and inequalities; rational, radical, and polynomial equations; polynomial and rational inequalities; exponential and logarithmic equations.
- Read and create representations of data using tables and graphs, interpret this information in the context of a real-life situation, and determine whether your answer makes sense in the context of the problem.
- Understand the concepts of relation and function, and use this information in a real-life situation.
- Identify features of a function from its algebraic and graphical representation (such as domain, range, intercepts, maximum and minimum values, intervals where the function is decreasing or increasing), and interpret this information in a real-life situation.
- Use appropriate functions (piecewise-defined, polynomial, logarithmic, exponential, inverse, etc) as mathematical models for a real-life situation and convert it into an appropriate mathematical statement.
- Understand transformations of a function and how transformations affect the shape of the graph of a function (horizontal and vertical transformations); and apply this understanding when graphing linear, quadratic, polynomial, exponential, and logarithmic functions.
- Develop and demonstrate the ability to communicate mathematical ideas clearly using correct mathematical terminology and appropriate mathematical notation.

These outcomes will be evaluated by homework assignments, in-class assessments, and exam questions.

See the weekly schedule on Blackboard for the specific dates associated with these outcomes.

Grading for Math 106: Your overall grade is based upon the following point system.

<table>
<thead>
<tr>
<th>Component</th>
<th>Score</th>
<th>Percentage</th>
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<tbody>
<tr>
<td>Aleks Modules, 20@10</td>
<td>(Drop 1)</td>
<td>(30%)</td>
</tr>
<tr>
<td>In-class activities</td>
<td>(20 Activities)</td>
<td>(20%)</td>
</tr>
<tr>
<td>Exam1</td>
<td>(07/06/2020)</td>
<td>(15%)</td>
</tr>
<tr>
<td>Exam2</td>
<td>(07/17/2020)</td>
<td>(15%)</td>
</tr>
<tr>
<td>Final Exam (comprehensive)</td>
<td>(07/31/2020)</td>
<td>(20%)</td>
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Grading Scale for Math 106

<table>
<thead>
<tr>
<th>Grade</th>
<th>Range</th>
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<tbody>
<tr>
<td>A</td>
<td>93% – 100%</td>
</tr>
<tr>
<td>A-</td>
<td>90% – 92.9%</td>
</tr>
<tr>
<td>B+</td>
<td>87% – 89.9%</td>
</tr>
<tr>
<td>B</td>
<td>83% – 86.9%</td>
</tr>
<tr>
<td>B-</td>
<td>80% – 82.9%</td>
</tr>
<tr>
<td>C</td>
<td>77% – 79.9%</td>
</tr>
<tr>
<td>C-</td>
<td>73% – 76.9%</td>
</tr>
<tr>
<td>Grades Requiring a Course Repeat</td>
<td>70% – 72.9%</td>
</tr>
</tbody>
</table>
IMPORTANT—What to expect from the class and how to approach it

This class is not easy 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, what you learn and 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. We will not have time to cover all details discussed in the text, so it is imperative that you complement the in-class work with a careful study of the text. Most of the practice working with the concepts will happen through the on-line homework system in ALEKS.

**Zoom:** Our classes will be meeting at the scheduled times every day. You do not need to have your own video going, but it is recommended to do so when we enter into breakout rooms. I will be monitoring the chat and breakout rooms for the class participation score. Please be courteous to everyone in the room. No obscenities in chat or spoken. Be aware of you surrounding before you turn your camera on. If you have technical issues, see: https://its.wsu.edu/wsu-video-conferencing-services/

Make sure that you have downloaded Zoom 5 (check for updates) as older version will not be allowed soon. Zoom does great with a medium-quality internet connection. Make sure you have one before class starts. If you can use a wired connection, then do so. Wireless connections are shared among many users, while a wired connection is just for you.

**ALEKS Modules:** The modules are through the on-line homework system within ALEKS. You will get immediate feedback regarding whether or not your answer is correct. We strongly recommend that you carefully correct any mistakes you make, in order for you to learn from them, and avoid them in the future (especially in exams!). Most learning comes from working through mistakes and figuring out what went wrong and why. *Mistakes are a good thing (really!) as long as you take the time to understand what went wrong and how to correct it.*

It is strongly recommend that you buy a composition notebook to use exclusively for ALEKS work. Even though you enter your answers on-line, you will still need to work through the problems. By having your work neatly organized in a notebook, it will be easy to review, you can take it to your instructor or a tutor to get questions answered, and it gives you practice organizing your work so that someone else can understand and follow your reasoning.

To earn points for the ALEKS assignment, you must accomplish a minimum of 60% of the module. Your score for the module will be found by multiplying your percentage complete by the assignment value (10 points). Example: If you finish 74% of the module, the score reflected in the gradebook will be 7.4 points out of 10 points. If you complete less than 60%, then you will receive a score of zero for the assignment grade.

**Participation Policy:** Attendance is expected. Attendance consists of 1) showing up on time, and 2) participating in class. Experience has shown that repeated tardiness, showing up more than five minutes late, or failing to participate fully will result in poor performance in the class. You do not need to email me in case of a missed class. It is your responsibility to check blackboard for announcements and course schedule. There will be times when I will ask a question over zoom- type in your answers into chat. I will be going over the chat logs- and combing with observations of
break-out rooms, in order to score a point for the day. This will max out at 25 points for the entire class. There are 26 non-exam days of class, so you can be sick without penalty.

Should you miss a class because of an illness or unexpected event, then it is your responsibility to catch up. Read the sections of the book that were covered, go over notes with another student, visit to the MLC, etc.

**Exams:** While assignments are the way to learn the material, exams are how prove that you have actually learned. There will be one exam every two weeks on a Friday

- **Early exams will not be given for any reason.** Make your travel plans accordingly.
- **If you know you must miss an exam, you must notify me at least 24 hours prior to the exam** in order to be eligible for a make-up exam. I will determine if a make-up exam is applicable.
- See blackboard for specific instructions taking each exam remotely.

**Important Dates and Deadlines:** Students are encouraged to refer to the academic calendar often to be aware of critical deadlines throughout the semester. The academic calendar can be found at http://registrar.wsu.edu/academic-calendar/.

**Class Notes:** You are expected to attend class every day and take careful, detailed notes. This practice helps you focus your attention on what is being covered, provides a clear record of what was discussed and emphasized in class, and is a good study aid when working out of class or studying for exams. Three ring binders are recommended, as handout materials can be placed along with your handwritten notes.

**In-class work:** We will have some in-class work every day. You can’t build muscle by watching someone lift weights, and you can’t learn math by watching someone else work problems. You will be expected to finish most of these problems in class, however they will be due by 11:59 pm (pacific) they day they are handed out.

Before every class, look at the schedule, and make sure that you are ready. “I’ve never seen this before” is not an excuse for the in-class work. If you were absent, then you need to read the book, and get someone else’s notes for the previous class(es).

The goal is to be an independent learner. I am certainly here to answer questions, but I should not be the first stop. When you have a questions; look to your notes, look to your book, and look to your neighbor before asking.

**Math Learning Center:** There is free tutoring available at the math learning center, which is entirely on-line this Summer. See blackboard for a current schedule of tutors and zoom links.

**Technology Issues:** Have a back up plan. For each assignment ask your self “what would I do if the wifi failed?” “Does my printer have enough ink/paper?” “At what times of the day does my internet speed up or slow down‡?” “Have I practiced using my phone to scan documents?” “Is my phone fully charged?” “is there another phone I can borrow if mine does not work?” and many, many more.

Pictures and scans are different things. Pictures tend to have large file sizes, potentially causing upload problems. Scans use a separate app on your phone. Many printers now-a-days have scanners built into them as well. See the Technology Discussion forum on blackboard to share what works, and what doesn’t work.

Don’t confuse wifi with 4GLTE or 5G. These are different technologies. Your phone will switch seamlessly between the two, causing confusion.

For technical issues that are WSU related, you can get help here: https://its.wsu.edu/csd Remember that I am here to help you with your Math, I am not a technical support person.
Family members, even neighbors usage of wifi can affect your own wifi speeds. Using an ethernet cable is always faster, and you don’t need to share with your neighbors.

**Students with Disabilities:** Reasonable accommodations are available for students with a documented disability. If you have a disability and need accommodations to fully participate in this class, please either visit or call the Access Center to schedule an appointment with an Access Advisor. All accommodations MUST be approved through the Access Center. For more information contact a Disability Specialist on your home campus.

Phone: (509)335-3417; Location: Washington Building 217; Website: http://accesscenter.wsu.edu;
Email: Access.Center@wsu.edu

**Incomplete Grade:** University policy (Acad. Reg. #90h) states that Incomplete grades may only be awarded "for students who for reasons beyond their control are unable to complete their work on time". To qualify for an incomplete you need to have finished at least 80% of the assigned work completed.

**WSU Safety:** Classroom and campus safety are of paramount importance at Washington State University, and are the shared responsibility of the entire campus population. WSU urges students to follow the “Alert, Assess, Act,” protocol for all types of emergencies and the “Run, Hide, Fight” response for an active shooter incident. Remain ALERT (through direct observation or emergency notification), ASSESS your specific situation, and ACT in the most appropriate way to assure your own safety (and the safety of others if you are able). Please sign up for emergency alerts on your account at MyWSU. For more information on this subject, campus safety, and related topics, please view the FBI’s *Run, Hide, Fight video* and visit the WSU safety portal.

**Severe Weather:** For severe weather alerts, see: http://alert.wsu.edu/ and https://oem.wsu.edu/emergency-procedures/severe-weather/. In the event of severe weather affecting university operations, guidance will be issued through the alert system.

**WSU Academic Integrity:** Academic integrity is the cornerstone of higher education. As such, all members of the university community share responsibility for maintaining and promoting the principles of integrity in all activities, including academic integrity and honest scholarship. Academic integrity will be strongly enforced in this course. Students who violate WSU’s Academic Integrity Policy (identified in Washington Administrative Code (WAC) 504-26-010(3) and -404) will receive a zero for the assignment or exam, will not have the option to withdraw from the course pending an appeal, and will be reported to the Office of Student Conduct. Cheating includes, but is not limited to, plagiarism and unauthorized collaboration as defined in the Standards of Conduct for Students, WAC 504-26-010(3). You need to read and understand all of the definitions of cheating: http://app.leg.wa.gov/WAC/default.aspx?cite=504-26-010. If you have any questions about what is and is not allowed in this course, you should ask course instructors before proceeding. If you wish to appeal a faculty member's decision relating to academic integrity, please use the form available at conduct.wsu.edu.