



Math 1996 Section 516 Problem Solving for Algebra Learners

Fall 2020

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Online Office Hours via Zoom Tues & Thurs 12:00PM – 1:00PM

MECS Division Chair: Elaine W. Clark ewclark@unm.edu

2 Credit Hours

OFFICE HOURS VIA ZOOM ARE ON TUES & THURS 12PM – 1PM.

I am here to help you so please do not hesitate to jump in. Below is the zoom meeting information and a link:

- Join Zoom Meeting: <https://unm.zoom.us/j/98452273841>
- Meeting ID: 984 5227 3841
- One tap mobile: +13462487799,,98452273841# US (Houston)

COURSE DESCRIPTION

This course provides a grounding in study skills, college readiness, and self-efficacy, as well as provides support in prerequisite knowledge to support success in Math 022: Intro to Algebra part II. Think of this as a laboratory for you to find your “math brain”.

Course Goals:

The goals of this course include:

- Providing students with support in establishing a sense of strong self-efficacy and a growth mindset.
- Debunking “math myths” related to how mathematics is learned and who can learn math.
- Helping students explore the foundations of mathematics so that they have a strong grounding in prerequisite knowledge for future mathematics courses.
- Helping students discover how they can best learn mathematics – the supports and resources they can use in this and future mathematics courses.

Student Learning Outcomes/Course Objectives

The following are the objectives for the course. Each unit will have specific learning objectives listed on the Overview Page. The activities in that unit are developed so that you can demonstrate you have met these objectives. The objectives are numbered here, not because this is the order in which you will meet them but for ease of reference.

By the end of this course students will be able to:

C1: Articulate what is meant by a “growth mindset”

C2: Describe ways in which they can help themselves reach a stronger sense of self-efficacy when it comes to learning mathematics.

C3: Devise a study plan that will help them in this and future mathematics courses.

C4: Model addition, subtraction, multiplication, and division of real numbers (including integers and fractions).

C5: Demonstrate critical thinking skills in solving mathematical problems.

Prerequisites and Co-requisites

To place into this class a student must meet one of these placement requirements:

- 237 or better on the Arithmetic Next Gen Accuplacer
- ACT 13 or more
- SAT 320 or more
- Or see an advisor about placement based on a high school transcript

Math 022: Intro to Algebra Part II is a co-requisite course. You must be enrolled in Math 022 in the same semester.

TECHNICAL SKILLS

To participate and succeed in this class, you will need to be able to perform the following basic technical tasks:

- Use UNM Learn (help documentation located in the "How to Use Learn" link on the left course menu, and also at [Online Student Documentation¹](#)). Also, UNM-Valencia provides a Blackboard Learn Jumpstart self-learning module to give you practice with the most commonly used tools in UNM Learn. Ask your instructor if you do not see the UNM-Valencia Blackboard Learn Jumpstart in your list of classes in UNM Learn.
- Use email – including attaching files, opening files, downloading attachments
- Copy and paste within applications including Microsoft Office
- Open a hyperlink (click on a hyperlink to access a website or online resource)
- Use Microsoft Office applications
 - Create, download, update, save and upload MS Word documents
 - Create, download, update, save and upload MS PowerPoint presentations
 - Create, download, update, save and upload MS Excel spreadsheets
 - Download, annotate, save and upload PDF files
 - Access MS Teams
- Use Zoom – basic account is all that may be needed. Visit the [UNM Zoom login page](#) to ensure that you can access your basic account.
- Download and install an application or plugin – required for participating in Zoom and/or MS Teams.

TECHNICAL REQUIREMENTS

Computer

- A high-speed Internet connection is highly recommended.
- Supported browsers include: [Detailed Supported Browsers and Operating Systems²](#)
- Any computer capable of running a recently updated web browser should be sufficient to access your online course. However, bear in mind that processor speed, amount of RAM, and Internet connection speed can *greatly* affect performance. ***Be aware, some programs that use mathematics will not work well on mobile devices such as smartphones or tablets.***

¹ <http://online.unm.edu/help/learn/students/>

² https://help.blackboard.com/Learn/Student/Getting_Started/Browser_Support

- Microsoft Office products are available free for all UNM students (more information on the [UNM IT Software Distribution and Downloads page](#)³)
- Please update your contact information in LoboWeb: [MyUNM Login](#)⁴. When you log into MyUNM, Enter LoboWeb. Click on the Personal Information link to make sure your contact information is up to date.
- Laptops may be available for checkout for the Fall semester from the [UNM-Valencia Library](#)⁵. Contact [UNM-Valencia Student Services](#)⁶ for more information.

Technical Support

- For UNM Learn Technical Support: (505) 277-0857 (24/7) or use the “Create a Tech Support Ticket” link in your course.
- For UNM-Valencia IT Support: (505)925-8911
- For UNM Web Conference Technical Help: (505) 277-0857

TEXTBOOK AND SUPPLEMENTAL MATERIALS

Required Textbooks:

None aside from the book required for your Math 021 class.

Required Supplementary Materials:

There will be articles and videos for you to read for homework in this class. These will be available as links in UNM Learn. Be sure you have the current version of Adobe Reader installed on your computer and are using a compatible web browser.

COURSEWORK AND PARTICIPATION

Instructor Response Time

I routinely check the course and my emails, Monday (8 am) – Friday (noon), and sometimes on the weekend. You can anticipate a 24 to 48-hour response from me, Monday – Thursday. I will try and respond to all weekend (Friday afternoon to Sunday) emails and postings by noon on Monday or earlier.

Procedures for Completing Coursework

Each week you will have an article to read or a video/some videos to watch on the topic of the week. Be sure to read or watch these either over the weekend or before the Wednesday discussion (see schedule below).

Expectations for Participation

- Read the article(s) or watch the video(s) assigned each week (30 minutes to 1 hour estimated to complete. How long it takes you to read the articles will depend on your reading speed.

³ <http://it.unm.edu/software/index.html>

⁴ <http://my.unm.edu/home>

⁵ <http://valencia.unm.edu/library/index.html>

⁶ <http://valencia.unm.edu/students/student-services.html>

- Participate in online discussions.
- Communicate with the instructor promptly either through UNM email or course messages in Learn. Do not send confidential information through an email account that is not your UNM email or in Learn.
- If you are having technical difficulties, take care of them as quickly as possible. Also, alert the instructor as soon as you can if you are having difficulties. Sometimes a five-minute meeting with the instructor or technical support can resolve an issue with which you could struggle for hours. Do not wait to reach out for help.
- Observe course netiquette at all times. When participating in online Zoom sessions, dress as if you are meeting in person, even if you never turn on your camera.

Netiquette

One of the overriding principles in online conversations is to “craft your responses effectively.” It is sometimes difficult to remember that real people are reading posted messages. This is especially true of online communication where others do not have the opportunity to see body language or hear the tone of voice; therefore, misunderstandings are more likely.

Please, follow these guidelines in *all* of your online responses and discussion postings.

- Honor everyone’s right to an opinion.
- Respect the right of each person to disagree with others.
- Respond honestly but thoughtfully and respectfully; use language that others will not consider foul or abusive. You may also use emoticons to convey a lighter tone.
- Respect your privacy and the privacy of others by not revealing information which you deem private and which you feel might embarrass you or others
- Be prepared to clarify statements that might be misunderstood or misinterpreted by others.

A Special Note about Anger

- Do not send messages that you have written when you are angry, even anonymous ones. In the online world, angry messages are known as “flaming” and are considered bad behavior. Venting and flaming are two different things. It is possible to vent without becoming “ugly.” Stick to the facts of what is causing you frustration.
- Do not send messages that are written all in upper case; this is the visual equivalent of SHOUTING. It is considered aggressive and is considered bad behavior. If you ever feel like shouting a message, take a deep breath, and wait until you have calmed down before responding. Then, respond calmly and factually.

[UNM Netiquette document](#)⁷

NOTES TO STUDENTS ABOUT PARTICIPATION IN A COURSE USING UNM LEARN:

Tracking Course Activity

UNM Learn automatically records all students’ activities including your first and last access to the course, the pages you have accessed, the number of discussion messages you have read and sent, web conferencing, discussion text, and posted discussion topics. This data can be accessed by the instructor to evaluate class participation and to identify students having difficulty

⁷ <http://online.unm.edu/help/learn/students/pdf/discussion-netiquette.pdf>

Submitting Assignments

When you submit an assignment via UNM Learn, you will receive an email receipt of your submission from do-not-reply@learn.unm.edu. Save this email as confirmation of your submission.

GRADING PROCEDURES:

WEEKLY CHECK-INS WITH INSTRUCTOR: (10% of final grade)

- I will be requiring weekly one-on-one meetings with you via Zoom.
- There will be a required meeting in the first week of class on Thursday 8/20 at 2PM.
- *Questions.* Bring your questions from the homework for this class and Math 021. My job is to help you learn the material, I cannot do that unless I know where you are misunderstanding or “not getting it.”

PARTICIPATION: (30% of Final Grade)

- You are expected to participate with the class in the online, virtual environment.
- You are expected to have the necessary course materials needed to participate
- There will be 1 to 2 weekly class discussion postings that will count towards your participation grade.
- You are expected to stay up to date with the class schedule of readings, and discussion postings

Absences: I do not require you to give me any sort of documentation for falling behind in the class. However, I do ask that you communicate with me via email. If you start to fall behind for any reason, please contact me as soon as possible so we can figure out what is needed for you to succeed in this class. If you fall behind in the class, you are still expected to complete all assignments.

Drop Policy:

Here are the reasons I may drop you from the class:

- If you miss the first week of the semester.
- If you have no presence in the virtual environment via UNMLearn or contact your instructor for 2 or more consecutive weeks.
- **If you are dropped from Math 1996, you will be dropped from Math 022 as well.**

If you added late, your counted absences start the day you registered for the class.

Do not depend on me to drop you if you decide not to take the class. You are responsible for withdrawing if you decide not to complete the course. If you are dropped or withdraw from Math 022 or Math 1996, you will be dropped from the other class.

CLASS ACTIVITIES: (30% of final grade)

- There will be class activities posted in Learn that will correspond with your Math 021 class.
- Each Unit in Math 021 will have an associated activity in this class. These activities need to be completed. If you successfully complete the in-class assignment, you may begin the next assignment.
- There will be a self-assessment letter you will do towards the end of the semester that will count towards your Class Activities grade

FINAL PROJECT: (30% of your final grade)

Your final project will consist of the following:

- A) One of the following
 - PowerPoint explaining two mathematical concepts in detail
 - A written Paper explaining two mathematical concepts in detail
 - A video explaining two mathematical concepts in detail
 - A completed project idea preapproved by the instructor

More instructions on how to complete your final project will be available separately.

Grading Scale:

COURSE AVERAGES:

Weekly Check-ins	10%
Participation	30%
Class Activities	30%
Final Project	30%
Total	100%

Letter Grade	Overall Course Score
A	90% or better
B	80% to 89%
C	70% to 79%
CR	70% or better
NC	Less than 70%

SUPPORT: If you are struggling in this course, do not be afraid to ask for help!

- Office Hours: See my office hours listed at the beginning of this syllabus. Feel free to log in for online office hours or make an appointment to get help.
- Form study groups: You may work together with other members of our class.
- Free Tutoring: The Math Center at Valencia campus has free tutoring available online to help with your course content questions as well as questions about using tools. Send an email to tutor@unm.edu to schedule an appointment or you can call 505-925-8907 for more information
- Student Services: There are various services provided in our Student Services Department. See below about equal access. Also, we have a testing center, advising, and career placement available: [Valencia Student Services](#)

UNM POLICIES

Equal Opportunity and Non-Discrimination

To meet obligations under Title IX, UNM faculty, Teaching Assistants, and Graduate Assistants are considered “responsible employees” by the [Department of Education](#)⁸ (see pg. 15). This designation requires that any report of gender discrimination which includes sexual harassment, sexual misconduct, and sexual violence made to a faculty member, TA, or GA must be reported to the Title IX Coordinator at the [Office of Equal Opportunity](#)⁹. [Read more about UNM policy regarding sexual misconduct](#)¹⁰.

Copyright Issues

All materials in this course fall under copyright laws and should not be downloaded, distributed, or used by students for any purpose outside this course.

[The UNM Copyright Guide](#)¹¹ has additional helpful information on this topic.

Accessibility and Accommodations

The American with Disabilities Act (ADA) is a federal anti-discrimination statute that provides comprehensive civil rights protection for persons with disabilities. Among other things, this legislation requires that all students with disabilities be guaranteed a learning environment that provides for reasonable accommodations of their disabilities. If you have a disability requiring an accommodation, please contact:

- [UNM-Valencia Student Services](#)¹² if you are a Valencia campus student. The phone number is 505-925-8560
- [UNM Accessibility Resource Center](#)¹³ in 2021 Mesa Vista Hall **if you are a main campus student**. The phone number is 505-277-3506.

Information about your disability is confidential and your instructor cannot refer you for accommodations. Be aware that you will need to provide documentation. If you need assistance in obtaining documentation, the offices above can assist you.

Accessibility Statements

[Blackboard's Accessibility statement](#)¹⁴

[Microsoft's Accessibility statement](#)¹⁵

⁸ <https://www2.ed.gov/about/offices/list/ocr/docs/qa-201404-title-ix.pdf>

⁹ <http://oeo.unm.edu/>

¹⁰ <https://policy.unm.edu/university-policies/2000/2740.html>

¹¹ <https://copyright.unm.edu/>

¹² <http://valencia.unm.edu/students/student-services.html>

¹³ <https://arc.unm.edu/>

¹⁴ <https://www.blackboard.com/blackboard-accessibility-commitment>

¹⁵ <https://www.microsoft.com/en-us/accessibility/>

Academic Integrity

You should be familiar with UNM's [Policy on Academic Dishonesty](#)¹⁶ and the [Student Code of Conduct](#)¹⁷ which outlines academic misconduct defined as plagiarism, cheating, fabrication, or facilitating any such act.

UNM RESOURCES

- [UNM Valencia Campus Tutoring Services](#)¹⁸
- [UNM Main Campus CAPS Tutoring Services](#)¹⁹
- [UNM-Valencia Library](#)²⁰
- [UNM Libraries](#)²¹
- [“Life” Resources available to UNM-Valencia Students](#)²²
- [Student Health & Counseling \(SHAC\) Online Services](#)²³

FOR MILITARY-CONNECTED STUDENTS

There are resources on campus designed to help you succeed. You can approach any faculty or staff for help with any issues you may encounter. Many faculty and staff have completed the GREEN ZONE training to learn about the unique challenges facing military-connected students. If you feel that you need help beyond what faculty and/or staff can give you, please reach out to the Veterans Resource Center on the main campus at 505-277-3181, or by email at vrcenter@unm.edu. The Veterans Coordinator at UNM-Valencia is in the Student Services Office, at 505-925-8560.

SEMESTER DEADLINES

Fall 2020 – 16-week classes (deadlines will be different for first and second 8-week classes)

- Monday, August 17: First day of class, classes available in Blackboard Learn
- Friday, August 28, by 5:00 PM: Last day to add a class or to change credit hours or grade mode in LoboWEB.
- Friday, September 4: Last day to drop without “W” grade and with 100% refund on LoboWEB
- Monday, September 7: LABOR DAY HOLIDAY
- Wednesday, October 7: FALL BREAK

¹⁶ <https://pathfinder.unm.edu/campus-policies/academic-dishonesty.html>

¹⁷ <https://pathfinder.unm.edu/code-of-conduct.html>

¹⁸ <http://valencia.unm.edu/campus-resources/the-learning-center/learning-center.html>

¹⁹ <http://caps.unm.edu/services/online-tutoring/olc.php>

²⁰ <http://valencia.unm.edu/library/index.html>

²¹ <https://library.unm.edu/>

²² <http://valencia.unm.edu/students/student-resources.html>

²³ <https://shac.unm.edu/>

- Tuesday, November 3: Election Day, no classes
- Friday, November 6: Last day to drop *without* Dean’s permission on LoboWEB. Will receive a “W” grade and will be responsible for tuition for the course.
- November 26-29: THANKSGIVING BREAK
- November 30 – December 4: All classes will convert to remote instruction if not already remote
- Friday, December 4: Last day to add sections and/or change credit hours with form, last day to drop *with* Dean’s permission. Will receive a “W” grade and will be responsible for tuition for the course.
- December 7-12: Finals week. All final exams are given remotely.

WEEKLY TOPICS, ARTICLES, AND VIDEOS

Be Aware: Some of the YouTube videos will have advertisements.

Week	Topic	Link(s) to articles or videos
August 17	Math Myths	Math Myths: Researchers debunk common misconceptions , by John Brasher, in Vanderbilt News published by Vanderbilt University. January 31, 2017
August 24	Learning from Mistakes	Why Mistakes Matter in Creating a Path For Learning , by Claudia Wallis, in Mind/Shift published by KQED. July 26, 2017
August 31 and September 7	Not a Math Person	‘Not a Math Person’: How to Remove Obstacles to Learning Math , by Katrina Schwartz, in Mind/Shift published by KQED. November 30, 2015
September 14	Everyone Can Do Well in Math	Mindset with Jo Boaler Video published in youtube by Stanford University, Graduate School of Education; Do You have Math Anxiety? Video published on YouTube by GCFLearnFree.org. February 15, 2019
September 21	Mindfulness	Facts about the effects of mindfulness by Shelley Kind and Stefan G. Hofmann, an article posted on Anxiety.org. November 10, 2014, February 10, 2016
September 28	Self-Efficacy	Self Efficacy and Why Believing in Yourself Matters by Kendra Cherry, in Personality Psychology published by verywellmind. May 17, 2020
October 5 and 12	Rewire Your Brain for Math	https://getpocket.com/explore/item/how-i-rewired-my-brain-to-become-fluent-in-math by Barbara Oakley, in Pocket Worthy published by Nautilus. September 15, 2016
October 19	Critical Thinking in Mathematics	Math Help: Critical Thinking in Math with Jimmy Chang. Video published on YouTube by eHow. December 5, 2009; Anyone Can Be a Math Person Once They Know the Best Learning

		Techniques with Po-Shen Loh. Video published on YouTube by BigThink under the auspices of The Hertz Foundation Fellowship. March 19, 2017
October 26 and November 2	Ways to Improve Self-Efficacy	4 Ways To Improve And Increase Self-Efficacy by Madhuleena Roy Chowdhury, in Home/The Self-published by PositivePsychology.com
November 9	Create a Study Plan for Life!	Put together all you have learned about math myths, mindset, mindfulness, and self-efficacy to create a study plan for life!
November 16	What is Algebra?	Algebra Basics: What is Algebra? Video posted on YouTube by Math Antics. May 22, 2015