



Math 1996

Problem Solving for Algebra Learners

Fall 2023

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Online Office Hours via Zoom Mon & Wed 4:30-5:30

Remind App Code:

Zoom Code 5:00-6:00

Up to 2 Credit Hours

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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 099: Pre-Algebra. 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: Create a glossary of mathematical terms and explain their meaning.

C6: 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 099: Pre-Algebra is a co-requisite course. Must be enrolled in Math 099 in the same semester.

Specific Course Requirements

Students will be creating an e-portfolio for this class so should have access to the Microsoft Office Suite – including One Drive and/or MS Teams –to share their portfolios with the instructor. For more information on how to download the MS Office Suite that is free to UNM students visit the [UNM IT Software Distribution and Downloads page](#).

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.

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

TECHNICAL REQUIREMENTS

Computer

- A high-speed Internet connection is highly recommended.
- Supported browsers include: [Detailed Supported Browsers and Operating Systems](#)²
- 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.***
- 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.

Web Conferencing

We will use Zoom for scheduled class meeting times and extra instructor-led study sessions.

Scheduled class meeting times: Monday through Thursday immediately following your Math 099 class.

Scheduled instructor-led help sessions: Monday thru Thursday 9:30 am -11:30 am

For these online sessions, you will need:

- A USB headset with microphone (highly recommended)
- A high-speed internet connection is highly recommended. A wireless Internet connection may be used if successfully tested for audio quality before web conferencing.
- You should also dress as you would when attending an in-person class, even if you do not turn on your video camera.

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 099 class.

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

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>

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 for postings or 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. You may also text me through the Remind App and I will get in touch with you in 2-4 hours.

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).

Late work: If you come to class on discussion days without having read the article(s) or watched the video(s) you will lose participation points. Be sure that you have something to offer in these discussions based on what you learned from these materials. If you need to miss class days, be sure to find out about any activities or assignments completed during that class session. Late submissions that are not discussions will be accepted up to a week late but will likely be docked up to 10% of the points. If you miss a discussion, you cannot make up those participation points.

Notifying Instructor of Absences: If at all possible, email the instructor or send a course message before class if you are not going to make it. If you are not able to notify the instructor before class, contact your instructor as soon as you can find out about missed work and create a catch-up plan.

Course Schedule

What we will do each week in this class:

Mondays	Talk briefly about the week's article or video, work on a critical thinking group activity
Tuesdays	Work on the glossary in your e-portfolio for this week's vocabulary Words
Wednesdays	Discuss the article or video for the week
Thursdays	Reflection journal – write a brief reflection on what you learned this week. This will be part of your e-portfolio.

See the list of semester deadlines and holidays given at the end of this syllabus.

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.

- Attend class each day.
- Participate in group activities and 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

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

accessed by the instructor to evaluate class participation and to identify students having difficulty

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

Attendance (signing into the class each day – 10 points per day)	550 points
Participation (completing the in-class assignment etc. – 10 pts/day)	550 points
Electronic Portfolio	<u>1000 points</u>
Total	2100 points

Expect to receive any submitted work back graded and with comments within two days of submission.

Grading Scale

Final grades will be based on the sum of all possible course points as noted above divided by a total of 2000 points (this allows for some automatically excused absences). The percentages below will determine your grade for this class:

Course Grade:

Percent	Letter Grade
89.5% or better	A or CR
79.5% to 89.4%	B or CR
69.5% to 79.4%	C or CR
69.4% or less	NC

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.

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>

COVID-19 Health and Awareness. UNM is a mask friendly, but not a mask required, community. To be registered or employed at UNM, Students, faculty, and staff must all meet UNM's [Administrative Mandate on Required COVID-19 vaccination](#). If you are experiencing COVID-19 symptoms, please do not come to class. If you have a positive COVID-19 test, please stay home for five days and isolate yourself from others, per the [Centers for Disease Control \(CDC\) guidelines](#). If you do need to stay home, please communicate with me through Remind or email. I can work with you to provide alternatives for course participation and completion. UNM faculty and staff know that these are challenging times. Please let me, an advisor, or another UNM staff member know that you need support so that we can connect you to the right resources. Please be aware that UNM will publish information on websites and email about any changes to our public health status and community response.

Title IX: In an effort to meet obligations under Title IX, UNM faculty, Teaching Assistants, and Graduate Assistants are considered “responsible employees.” 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 (oeo.unm.edu). For more information on the campus policy regarding sexual misconduct, see: <https://policy.unm.edu/university-policies/2000/2740.html>

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 Guide¹¹](#) 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 Services¹²](#) if you are a Valencia campus student. The phone number is 505-925-8560
- [UNM Accessibility Resource Center¹³](#) in 2021 Mesa Vista Hall **if you are a main campus student**. The phone number is 505-277-3506.

Accommodations: UNM is committed to providing equitable access to learning opportunities for students with documented disabilities. As your instructor, it is my objective to facilitate an inclusive classroom setting, in which students have full access and opportunity to participate. To engage in a confidential conversation about the

¹¹ <https://copyright.unm.edu/>

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

¹³ <https://arc.unm.edu/>

process for requesting reasonable accommodations for this class and/or program, please contact Accessibility Resource Center at arcsrvs@unm.edu or by phone at 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 statement¹⁴](#)

[Microsoft's Accessibility statement¹⁵](#)

Academic Integrity

You should be familiar with UNM's [Policy on Academic Dishonesty¹⁶](#) and the [Student Code of Conduct¹⁷](#) which outlines academic misconduct defined as plagiarism, cheating, fabrication, or facilitating any such act.

Drop Policy:

- Students who do not attend during the first week of classes will be dropped from this class and Math 099.
- Students who miss more than three consecutive days during the first three weeks of class will be dropped from this class and Math 099.
- Students who miss more than three days during the semester will be on notice and may be dropped from this class and Math 099.

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 099 or Math 1996, you will be dropped from the other class.

UNM RESOURCES

- [UNM Valencia Campus Tutoring Services¹⁸](#)
- [UNM Main Campus CAPS Tutoring Services¹⁹](#)
- [UNM-Valencia Library²⁰](#)
- [UNM Libraries²¹](#)

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

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

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/>

- [“Life” Resources available to UNM-Valencia Students²²](#)
- [Student Health & Counseling \(SHAC\) Online Services²³](#)

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 vrc@unm.edu. The Veterans Coordinator at UNM-Valencia is in the Student Services Office, at 505-925-8560.

INSTRUCTIONS FOR E-PORTFOLIO

The E-Portfolio is a collection of your work thought out the semester. You will complete weekly journal entries and math terminology entries in Blackboard Learn. You should also be saving these entries to your folder in one drive.

Your last assignment will be to write a one-page single-spaced reflection paper over what you have learned this semester. More details about the reflection paper will be given to you at a later date.

Journal 400 points
 Math Glossary 400 points
 Reflection paper 200 points

In your Blackboard Learn , you will upload your reflection paper, complete math journal entries, and complete math glossary.

WEEKLY TOPICS, ARTICLES, AND VIDEOS

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

Week	Topic	Link(s) to articles or videos
1	Math Myths	Math Myths: Researchers debunk common misconceptions , by John Brasher, in Vanderbilt News published by Vanderbilt University. January 31, 2017
2	Learning from Mistakes	Why Mistakes Matter in Creating a Path For Learning , by Claudia Wallis, in Mind/Shift published by KQED. July 26, 2017

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

²³ <https://shac.unm.edu/>

3	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
4 5	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
6	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
7	Self-Efficacy	Self Efficacy and Why Believing in Yourself Matters by Kendra Cherry, in Personality Psychology published by verywellmind. May 17, 2020
8 9	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
10	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
11 12	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
13 14	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!
15 126	What is Algebra?	Algebra Basics: What is Algebra? Video posted on YouTube by Math Antics. May 22, 2015