

Math 1220: D.C. College Algebra Online Course

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Contents

1	Office and Contact Information:	3	
2	Office Hours:	3	
3	Overview		
4	Student Learning Outcomes (SLOs)	4	
5	Technical Requirements 5.1 Computer 5.2 Printer/Scanner 5.3 Web Conferencing	5 5 5 5	
6	Netiquette 6.1 A Special Note about Anger	6 6	
7	Notes to students about participation in course using UNM Canvas:7.1Tracking Course Activity7.2Submitting Assignments	6 6 7	
8	Coursework and Participation8.1Communication with Instructor8.2Late or Missing Work8.3Expectations for Students	7 7 7 7	
9	Required Text	8	
10	Course Structure	8	

11	Grading Policy	8
12	Semester Deadlines	9
13	UNM Policies	9
	13.1 EQUAL OPPORTUNITY AND NON-DISCRIMINATION:	9
	13.2 COVID-19 Health and Awareness	9
	13.3 Support	10
	13.4 Copyright	10
	13.5 Accessibility and Accommodations	10
	13.6 Land Acknowledgement	10
	13.7 Academic Integrity	11
	13.8 A Note About Plagiarism/Cheating	11
14	UNM Resources	11
15	General Education Core Curriculum Essential Skills	11
	15.1 Critical Thinking	11
	15.2 Communication	12
	15.3 Quantitative Reasoning	12

1 Office and Contact Information:

Office: A-123B Office Phone: 505-925-8607 Email: ataylor19@unm.edu

Please note that email is my preferred method of communication. This is the best way to get in contact with me when you need to, outside of the office hours/instructor-led help sessions. :)

2 Office Hours:

Tues/Thurs: Learning Center/Math Center, Valencia Campus, 2:00PM-3:00PM Mon/Wed: Online Zoom Help, Office Hours Zoom Room (Passcode:OfcHrs), 2:00PM-3:00PM OR BY APPOINTMENT

3 Overview

Welcome to Math 1220! Here is the UNM course description:

Math 1220 The study of equations, functions and graphs, reviewing linear and quadratic functions, and concentrating on polynomial, rational, exponential and logarithmic functions. Emphasizes algebraic problem solving skills and graphical representation of functions.

Prerequisites/placement: Successful completion of MATH 1215 or minimum ACCUPLACER score of 239-248 (Advanced A and F) or math ACT score of 22-24, or math SAT score of 510-569.

Note: This syllabus is subject to change, if needed.

4 Student Learning Outcomes (SLOs)

Upon successful completion of the course, students will be able to:

- 1. Demonstrate appropriate use of basic function language and notation.
 - (a) Communicate or present mathematical concepts using correct mathematical notation and terminology.
 - (b) Correctly use function notation and vocabulary related to functions.
 - (c) Determine function values for given domain values and determine domain values for given function values.
 - (d) Determine domains for specific functions.
- 2. Solve single-variable equations of the types listed above.
 - (a) Solve equations containing rational expressions.
 - (b) Solve equations containing radical expressions.
 - (c) Solve absolute value equations in one variable.
 - (d) Solve exponential and logarithmic equations equating bases, using a change of base formula for logarithms, using properties of exponents/logarithms to expand/condense expressions, or converting between logarithmic and exponential form for an equation.
- 3. Interpret and communicate algebraic solutions graphically and numerically.
- 4. Demonstrate contextual problem-solving skills that include setting up and solving problems and interpreting solutions in context.
 - (a) Analyze solutions to application problems and give them contextual meaning.
- 5. Apply appropriate problem-solving methods using algebraic, graphical, and numerical means.
 - (a) Perform operations with radical expressions.
 - (b) Perform operations with rational expressions.
 - (c) Solve absolute value inequalities in one variable.
 - (d) Apply solution methods learned to application problems.
- 6. Perform function arithmetic, including composition; find inverse functions.
- 7. Identify functions and their transformations given an algebraic, graphical, numerical, or verbal description.
- 8. Graph and interpret key features of functions, e.g., intercepts, leading term, end behavior, and asymptotes.
- 9. Solve equations algebraically to answer questions about graphs and use graphs to estimate solutions to equations.
- 10. Solve contextual problems by identifying the appropriate type of function given the context and creating a formula based on the information given.
- 11. Communicate mathematical information using proper notation and verbal explanations.

5 Technical Requirements

5.1 Computer

- A high-speed Internet connection is highly recommended.
- Supported browsers include: Detailed Supported Browsers and Operating Systems
- 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 smart phones or tablets.
- Microsoft Office products are available free for all UNM students: UNM IT Software Distribution and Downloads page
- Please update your contact information in Loboweb: <u>MyUNM</u>. 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 <u>UNM-Valencia Library</u>. Contact <u>UNM-Valencia Student Services</u> for more information.

5.2 Printer/Scanner

You will need access to a printer/scanner in order to print out written assessments such as projects or exams, and scan them in order to submit via UNM Canvas as a single, compiled PDF. The free smartphone 'Adobe Scan' can be very helpful in performing scanning, conversion to PDF and submission to Canvas, though when submitting, I'd recommend doing so through a computer. The process I'd recommend if you use Adobe Scan is to email a copy of the PDF to yourself, download on your computer, then submit that file in the Canvas dropbox.

5.3 Web Conferencing

Web conferencing will be used in this course during office hours and study sessions. For the online sessions, you will need:

- A USB headset with microphone. Headsets are widely available at stores that sell electronics, at the UNM Bookstore or online.
- A high-speed internet connection is highly recommended for these sessions. A wireless Internet connection may be used if successfully tested for audio quality prior to 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.
- To create a UNM supported Zoom account, visit the UNM Zoom log in page.

6 Netiquette

NOTE: For links to online PDF formatted documents, you may need to give permission for the document to open. Look for a pop-up window asking for your permission.

One of the overriding principles in online conversations is to "craft your responses effectively." It is sometimes difficult to remember that there are real people reading posted messages. This is especially true of online communication where others do not have the opportunity to see body language or hear 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 which others will not consider foul or abusive. You may also use emoticons to convey a lighter tone.
- Respect your own 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 which might be misunderstood or misinterpreted by others.

6.1 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 "flamingâ and are considered bad behavior. Venting and flaming are two different things. It is possible to vent without becoming "ugly.â 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 in a calm and factual manner.
- For more information on netiquette, please refer to UNM Netiquette document.

7 Notes to students about participation in course using UNM Canvas:

7.1 Tracking Course Activity

Canvas automatically records all student 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.

7.2 Submitting Assignments

All assignments (with the exception of exams) will be submitted through Canvas as a **single PDF document**. The free smartphone 'Adobe Scan' can be very helpful in performing scanning, conversion to PDF and submission to Canvas, though when submitting, I'd recommend doing so through a computer. The process I'd recommend if you use Adobe Scan is to email a copy of the PDF to yourself, download on your computer, then submit that file in the Canvas dropbox.

When you submit an assignment via Canvas, keep in mind the following:

Once you submit your assignment you will not automatically receive a submission receipt. It is up to you to ensure that youâve submitted the correct file by the deadline. To do this, I recommend checking you can see the âSubmitted!â notification. This also lists the time you submitted it. Remember that even if this shows that youâve submitted on the hour (for example at 15:00) this may still be classed as late as anything received at 15:00.01 or later is classed as late. Another precaution you can take is to download the document you submitted. This means you can double-check that you submitted the correct document.

8 Coursework and Participation

8.1 Communication with Instructor

Email is my preferred method of communication. I routinely check for student emails, Monday through Friday, at various times throughout the morning, afternoon and evening, as well as occasionally on weekends. Expect a response no later than 24-48 hours. If I haven't responded within 48 hours, please resend your email, as it may have (accidentally) been overlooked! Also, all students should be aware that the secret phrase is *"I can do this"*.

8.2 Late or Missing Work

- Late work *may* be accepted up to 4 times per semester, for any reason. In order to use a late submission, you must notify me before the due date.
- All written work needs to be submitted online in Canvas, with the exception of exams.
- If you are ill for an extended period of time, and are not able to complete work on time, please let me know as soon as possible. I will work with you to shift deadlines but be aware that all assignments must be complete by the end of the semester. This may mean that when you are feeling better you will need to spend a lot of extra time catching up. Also, if you are behind, the posted lectures or class session recordings may not be as helpful to your learning until you are ready to learn that material.

8.3 Expectations for Students

Please note that in order to be successful in this course, and in mathematics courses in general, you will need to spend a fair amount of time each week working on this course.

Here are my recommendations for the *minimum* amount of time you should be spending in this course *each week*:

- Homework: 4-6 hours/week
- Office Hours: 30 min to 2 hours/week
- · General Studying: 1-3 hours/week outside of homework and office hours

A more detailed schedule for assignments, exams, projects, and their due dates can be found on Canvas and may be subject to change.

9 Required Text

The required text (or eText) for this course is 'College Algebra' on OpenStax. It is freely accessible online, here: College Algebra Textbook

10 Course Structure

This course will consist of the following graded components.

- Homework [12](20%)
- Participation, High School Homework (20%)
- Projects [2] (10%)
- Exams [3] (50%):

For written assessment submissions such as projects and exams, you should typically expect your grades within one week.

11 Grading Policy

Your final grades will be calculated as follows. Your current average can be found in the 'Grades' section in Canvas.

Cumulative Average	Final Grade
[96.5%, 100%]	A+
[93%, 96.5%)	А
[89.5%, 93%)	A-
[86.5%, 89.5%)	B+
[83%, 86.5%)	В
[79.5%, 83%)	B-
[76.5%, 79.5%)	C+
[69.5%, 76.5%)	С
[66.5%, 69.5%)	D+
[59.5%, 66.5%)	D
[0%, 59.5%)	F

12 Semester Deadlines

Spring 2023, full semester (16 week) course.

- Monday, January 16 MLK Day: No class.
- Tuesday, January 17: First day of class, classes available in Canvas
- Friday, January 27 by 5:00 PM: Last day to add a class or to change credit hours or grade mode in LoboWEB.
- Friday, February 3, 5:00pm: Last day to drop without "W" grade and with 100% refund on LoboWEB
- March 12-March 19: Spring Break, No class.
- Friday, April 14th: Last day to drop without Dean's permission on LoboWEB. Will receive "W" grade and will be responsible for tuition for the course.
- Friday, May 5th: Last day to drop with Dean's permission. Will receive "W" grade and will be responsible for tuition for the course.
- May 8th-May 13th: Finals week.

13 UNM Policies

13.1 EQUAL OPPORTUNITY AND NON-DISCRIMINATION:

In an effort to meet obligations under Title IX, UNM faculty, Teaching Assistants, and Graduate Assistants are considered "responsible employees" by the Department of Education (see page 15 of this link). 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/.niversity-policies/2000/2740.html.

13.2 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 at ataylor19@unm.edu; 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.

13.3 Support

- **PASOS Resource Center** (505) 925-8546, mailto:pasos@unm.edu. The Resource Center is an on-campus center that serves as a "one-stop" for all non-academic needs of UNM-Valencia students.
- **Student Health and Counseling (SHAC)** at (505) 277-3136. If you are having active respiratory symptoms (e.g., fever, cough, sore throat, etc.) AND need testing for COVID-19; OR If you recently tested positive and may need oral treatment, call SHAC.
- LoboRESPECT Advocacy Center (505) 277-2911 can offer help with contacting faculty and managing challenges that impact your UNM experience.

13.4 Copyright

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 <u>UNM Copyright Guide</u> has additional helpful information on this topic.

13.5 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 accommodation, please contact:

- <u>UNM-Valencia Student Services</u> if you are a Valencia campus student. The phone number is 505-925-8560.
- The <u>UNM Accessibility Resource Center</u> in 2021 Mesa Vista Hall if you are a main campus student. The phone number is 505-277-3506.

13.6 Land Acknowledgement

Founded in 1889, the University of New Mexico sits on the traditional homelands of the Pueblo of Sandia. The original peoples of New Mexico Pueblo, Navajo, and Apache since time immemorial, have deep connections to the land and have made significant contributions to the broader community statewide. We honor the land itself and those who remain stewards of this land throughout the generations and also acknowledge our committed relationship to Indigenous peoples. We gratefully recognize our history.

13.7 Academic Integrity

You should be familiar with <u>UNM's Policy on Academic Dishonesty</u> and the <u>Student Code of Conduct</u> which outline academic misconduct defined as plagiarism, cheating, fabrication, or facilitating any such act.

13.8 A Note About Plagiarism/Cheating

Cheating is any behavior that short circuits your learning. This can range from mindlessly mimicking what you see in the readings or examples, to simply copying someone else's solution, to paying someone to complete the assignment or course for you. The use of any program or app like Chegg, Wolfram Alpha, PhotoMath and others on your computer or phone to copy down solutions for homework, quiz, or exam questions constitutes plagiarism. *The penalties for plagiarism may include being given a '0' on the plagiarized assignment/exam, which could result in a significantly lowered/failing grade in the course.* If you ask for help from someone other than the instructor or a tutor and then just copy down what they tell you, that is also cheating. In all of your assignments you should demonstrate what you understand. If you do not understand, ask for help from your instructor!

14 UNM Resources

- UNM Valencia Campus Tutoring Services
- UNM Main Campus CAPS Tutoring Services
- UNM-Valencia Library
- <u>UNM Libraries</u>
- "Life" Resources available to UNM-Valencia Students
- Student Health Counseling (SHAC) Online Services

15 General Education Core Curriculum Essential Skills

In addition to the course learning objectives listed above, because this class meets a UNM General Education Core Curriculum requirement, activities in each unit (i.e.: discussions, assignments, and assessments) are developed so that you can demonstrate development of these essential skills:

15.1 Critical Thinking

- Problem Setting: Delineate a problem or question to be considered critically.
- Evidence Acquisition: Identify and gather the information/data necessary to coherently address the problem or question.
- Evidence Evaluation: Evaluate the information given by sources for credibility (e.g. bias, reliability, validity) and probably truth.

• Reasoning/Conclusion: Develop conclusions and outcomes that reflect an informed, well-reasoned argument.

15.2 Communication

- Genre and Disciplinary Conventions: Use formal and informal rules/registers appropriate for the particular audience, community, purpose, context, and kind of text and/or media at hand; use them to guide formatting, organization, and stylistic choices are present.
- Strategies for Understanding and Evaluating Messages: Apply strategies such as reading/analyzing for main points or themes; recognizing the variety of rhetorical situations and accompanying strategies that may contextualize messages; locating supportive documentation for arguments to understand and evaluate messages in terms of the rhetorical situation.
- Evaluation and Production of Arguments: Recognize and evaluate the authority of sources in their own arguments and those of others; distinguish among supported claims, unsupported claims, facts, inferences, and opinions.

15.3 Quantitative Reasoning

- Communication and/or Representation of Quantitative Information: Express quantitative information symbolically, graphically, and in written or oral language
- Analysis of Quantitative Arguments: Interpret, analyze and critique information or a line of reasoning presented by others
- Application of Quantitative Models: Apply appropriate quantitative models to real-world or other contextual problems