



Syllabus-Fall 2020

Title of Course-Section: MATH 1220-550 (College Algebra)

Name of Department: Mathematic, Engineering, & Computer Science Instructor: Andisheh Dadashi, Assistant Prof. of Mathematics

E-Mail: andisheh@unm.edu

Class Meeting Days/Times:

Not scheduled Credit Hours: 3 credit hours

Class Location: Online (Slack)
Office Location: Online (Slack)

Office Hours: Tuesdays and Thursdays: 12 pm to 3 pm (Online)

Mondays and Wednesdays: 9 am to 12 pm (Online)

or by appointment

Note: The instructor reserves the right to change the syllabus at any point of time during the semester.

Get to know your instructor:

Andisheh Dadashi earned her bachelor's degrees in Mathematics and Statistics from a ranked university in her native Iran. After finishing her undergraduate degrees, she studied abroad in India where she earned her first Master's degree in Statistics. She later moved to the USA to pursue a Ph.D. in Statistics at the University of New Mexico (UNM) and in 2016, she was offered a faculty position as a visiting Lecturer II at UNM-Gallup after receiving her second Master's degree in Statistics.

Andisheh is a strong advocate of higher education and is following her mother's footsteps who was also a University professor in Iran. Because STEM education is becoming increasingly interdisciplinary, Andisheh sought to complement her background in mathematics and statistics with computer science and is eager to integrate data science into her curriculum. Andisheh is currently working on a Ph.D. in computer science and her research includes astrobiology and biomedical informatics while concurrently teaching mathematics, statistics, and computer programming at UNM-Valencia.

To know Andisheh watch this video Click on this link

** Email **

In subject of your email to me, please mention your course name, number, and section number. For example, the subject of your email to me should be: MATH 1220-550

You must only contact me with your **UNM e-mail**. Check your **UNM email frequently**. You are responsible for missing any announcement I sent via email or Slack. Failure to identify your message with the class number, and not using your UNM email will result in no response at all.

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Essential Skills

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:

Critical Thinking

- o Problem Setting: Delineate a problem or question to be considered critically.
- o Evidence Acquisition: Identify and gather the information/data necessary to coherently address the problem or question.
- o Evidence Evaluation: Evaluate the information given by sources for credibility (e.g. bias, reliability, validity) and probably truth.
- o Reasoning/Conclusion: Develop conclusions and outcomes that reflect an informed, well-reasoned argument.

Communication

- o 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.
- o 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.
- o 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.

Quantitative Reasoning

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

Learning Objectives and Outcomes

Pre-requisites/Co-requisites: Grade of C or better in MATH 1215X and 1215Y and 1215Z or MATH 1170 + MATH 1215Z or MATH 1215, or minimum ACCUPLACER score of ≥ 239 (A&F) or math ACT score of ≥ 22 , or math SAT score of ≥ 540 .

Students will build on their knowledge of polynomial, rational, absolute value, radical, exponential and logarithm functions in the following contexts:

- 1. Use function notation; perform function arithmetic, including composition; find inverse functions.
- 2. Identify functions and their transformations given in algebraic, graphical, numerical, and verbal representations, and explain the connections between these representations.
- 3. Graph and interpret key feature of functions, e.g., intercepts, leading term, end behavior, asymptotes.
- 4. Solve equations algebraically to answer questions about graphs, and use graphs to estimate solutions to equations.
- 5. Solve contextual problems by identifying the appropriate type of function given the context and creating a formula based on the information given.
- 6. Communicate mathematical information using proper notation and verbal explanations.

Sign up for Slack

All the course communication will be placed in Slack.

Click on this link and watch the video tutorial I created for you.

Slack is where work flows. It's where the people you need, the information you share, and the tools you use come together to get things done. Slack can replace email, text messaging, and instant messaging for your team, and keep all those communication styles together in one app. With both desktop and mobile versions, Slack can help your team collaborate and coordinate their work no matter where they are — in the field office, at home, or out knocking doors.

Join our MATH1220 Slack group by following the invitation link I sent to your UNM email

To sign up only use your **UNM-Email**.

As soon as you click on the link you will be directed to Slack website and you should enter your UNM-email.

On Slack the display name must be your first name – Last name. Also, please write down and send me your UNM-ID Number in a private message (Click on my name and you can send me a private message).

Please, have the app on your phone too so you can receive the notifications on your phone when I post. I may post some extra credit questions on Slack for a short time so if you don't want to miss it please have the notification on.

Instructor's Availability on Slack or Via email

- The best way of contacting me will be on Slack workplace.
- In all cases please, give me 24 hours to 48 hours to reach back to you. (This is how professional setting works)
- I will be available on Slack or via email during the day until 6 pm as long as I am not in the classroom teaching.
- I will not be able to respond to any email or any messages on Slack on Saturday and Sunday.
- Even though sometimes it seems I am online on Slack but I may be working on other tasks so please be patient and give me 24 hours to 48 hours to reach back to you.

Messaging & Channels on Slack

When you sign up for Slack, you should be able to find at least one Channel on the left side of your workplace. By clicking the "+" sign you should be able to add the rest of channels to your work place.

- These are 7 Public Channels that all the students have access to, so you can share ideas with your classmate, ask for help, or ask for questions
- Please, be very careful not sharing your written work/project or reports on any Public Channels. Remember your classmates are able to see or download what you are sharing on public channels.
- Please, share your written work/project and reports with me through a private message by clicking on my name on the left side of the workplace.

Public Channels: Announcements, Written-Work, Exam-Review, guided-notes, PowerPoint-slides, video-links, guided-notes, video-tutorial, Projects.

Video on UNM-Learn (Slack instruction for our course)

Download Slack for Mac

Download Slack for windows

Download Slack for ios

Download Slack for android

Evalua	tion/	'Grac	ling N	Aethod	S
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Your final grade in this class is based on the following components:

Written work/project or Written Assignment	15~%
Exam 1 & Exam 2	20~%
Final Exam	25~%
Overall	60 %

This will account for the 60% of your overall grade. The rest of your grade (40%) will be from your teacher at your school. This 40% from your teacher includes all the work that your teacher assigns to you.

Overall Grade and Letter Grade

Passing grade in this course is 70% or better.

In order to pass this course your grade on the final exam must be 70% or better.

Overall Grades: pluses and minuses may or may not be added to letter grades at the instructor's discretion. Grades of A+ are not rare and will only be awarded for exceptional work.

Grade	From	То	Grade	From	То	Grade	From	То
A+	98	100	B+	88	89.99	C+	78	79.99
A	93	97.99	В	83	87.99	С	70	77.99
A-	90	92.99	B-	80	82.99	D	60	69.99

Where do you find your grade?

In Pearson: On the left side of the main page you will see an option named "Grade Book". Your Up to dated grade can be find in your grade book

Course Outline - eBook - Package (Pearson)

Book and Package: College Algebra, Concepts Through Functions, (4th Edition), Sullivan and Sullivan, Inclusive Access with MyMathLab, Pearson Package (e-book).

written work/project or Written Assignment

You will have paper and pencil written work/project throughout the semester to help you learn to write and communicate mathematics.

You may also be assigned other written work/project.

There will be approximately 3 written work/project through out the semester prior to your Exams and final exam. Each written work/project is consist of almost 40 homework questions plus a project at the end of the pdf. To receive credit for the questions you must show your work.

You must begin working on your written work/project three weeks before the due date to be able to finish the entire work. You can ask your classmate to work on each Written Assignment in a group but your explanation must be different. Therefore you must explain the outcome based on your understanding and not copying others' responses. Any plagiarism count as cheating according to the "Academic dishonesty" section.

Where do you find the Written Assignment?

I will upload a pdf version of each Written Assignment on Slack in Written-Work channel. You can download it on a PC or laptop as a pdf and print it out or you may write down the answers on a paper or your note then send the scan (picture) of your answers to me on Slack. Answers must be in order and clear to follow.

Where do you submit the written work/project?

When you finish your written work/project and have responded to or filled all the required parts, you will scan your written work/project and save it as a pdf on your PC or Laptop. You will send the saved pdf to me through Slack in a private message. (Don't share your written work/project in public channels)

written work/project Due dates:

Due dates are due to the change but we try to stay on top of our schedule. Remember please, all the due times are at 8 am! Have a look at the "Course Schedule"

Due dates are very important. After the due date, no written work/project is accepted to be fair to all the students who work very hard.

Online Exams

More information will be posted on Slack announcement channel.

There are three On-line exams throughout this course: Exam 1, Exam 2, and Final

For the On-Line exams: You can begin your On-line exams at 12:05 am on the exam day and your due time will be 11:55 pm on the same day. You have only one attempt which means if you start your exam you must finish your exam in one session otherwise you will receive zero. You have 120 minutes to answer all the questions in one session.

You can find the due dates here in "Course Schedule"

During the exam you must show all your work on a piece of paper(s) with including all the proper mathematical notation. After finishing your exam submit your exam to your teacher Mr. Pemble. Please, contact Mr. Pemple for more information.

If you must miss an exam, you must contact your instructor a couple of days before the day of the exam in order to discuss a make-up test. Make-up tests will be given solely at your instructor's discretion and only in cases of well documented excused absences. If you miss an exam and do not contact your instructor immediately, you may be dropped from the course.

No early exams will be permitted except in documented emergencies: flight reservations, weddings, vacations, birthdays, non-NCAA sporting events etc. are not considered emergencies. More detail about your Exams and Final will be discussed in the class during the semester.

Calculator

Scientific calculator may be necessary. No calculators will be allowed on any of the exams (including the final).

Teaching Materials

Where can you find the materials for this class?

- a. You can find my lectures note/Pdf in the Notes Channel on Slack.
- b. There are some PowerPoint and image and clicker slides on the home page of Pearson provided by publisher you may find useful. You can find them all in the resource section on the homepage.
- c. UNM Mathematics and Statistics department has provided the past exams for you which is similar to the exams we have in this course. Click Here!
- d. There are Math videos provided by publisher for each chapter. These videos will help you to enhance your learning.
- e. Study Plans are the best resource to practice the chapter content. It shows you the weakness or strength in a certain section of a chapter. It will give you more questions from the section that you need to work on more. Study Plans are accessible on Pearson's homepage.
- f. There are many study plans and videos under "Tools for Success" and "Skills for Success" and "Algebra review" in Pearson. You should go through all these options to find which one is the most helpful for you.

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." Office Hours" Feel free to come by or 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 on Slack.
- Free Tutoring: The Math Center at Valencia campus has free tutoring and open labs. Call 505-925-8907 for more information. CAPS on main campus also provides tutoring for which I can get documentation."LRC"
- Student Services: There are various services provided in our Student Services Department. Read about "ARC" equal access Services. Also, we have a testing center, advising, and career placement available: Valencia Student Services

Academic Dishonesty

Having academic integrity is paramount to your success in any class. Plagiarism or cheating is not tolerated. Any instance of this will result in a grade of zero for that assignment. Here is the link to the UNM Academic Dishonesty Policy: Click Here!

The policy states: Each student is expected to maintain the highest standards of honesty and integrity in academic and professional matters. The University reserves the right to take disciplinary action, up to and including dismissal, against any student who is found guilty of academic dishonesty or who otherwise fails to meet the expected standards. Any student judged to have engaged in academic dishonesty in course work may receive a reduced or failing grade for the work in question and/or for the course.

Academic Dishonesty is defined as:

"Academic dishonesty" includes, but is not limited to, dishonesty in quizzes, tests, or assignments; claiming credit for work not done or done by others; hindering the academic work of other students; misrepresenting academic or professional qualifications within or without the University; and nondisclosure or misrepresentation in filling out applications or other University records.

Cheating students will be prosecuted according to University guidelines. Students should get acquainted with their rights and responsibilities as explained in the Student Code of Conduct Click Here!

StudentBehavior & CollegialBehavior

According to the Code of Conduct as stated in the Policies and Regulations for UNM, student activities that interfere with the rights of others to pursue their education or to conduct their University duties and responsibilities will lead to disciplinary action.

This includes any activities that are disruptive to the class and any acts of academic dishonesty. Students are expected to behave in a courteous and respectful manner toward the instructor and their fellow students. Students may be dropped from a class for inappropriate behavior. For more information: Click Here!

Since we assume you are all adults, we will expect from you, respectful adult behavior. Engaging in disruptive or unruly behavior could result in your being asked to leave, at which time you will be counted absent and a referral will be sent to the Associate Dean of Student Services. Continuing to behave in this way could result in your being dropped from the course. Disruptive or unruly behavior includes but is not limited to:

- texting or talking on your cell phone or Laptop at any time during class,
- continually talking with your neighbor when we are not working on a group activity,
- working on homework from another class,
- reading material or watching media on a mobile device not related to this course or at a time that is inappropriate,
- refusing to participate in the class activities.

UNM Valencia Title IX Representative

Title IX (9) Statement: 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 pg. 15 - http://www2.ed.gov/about/offices/list/ocr/docs/qa-201404-title-ix.pdf). 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: Click Here!

Your Responsibility

EXPECTATIONS: Students are expected to conduct themselves in a polite, courteous, professional and collegial manner. Cell phones must be set on silent and be out of sight during class. No food or drink is allowed in the computer labs.

Time for This Course: Plan to spend a minimum of 9 to 12 hours per week for this class. There is no guarantee you will pass if you dedicate this amount of time, you still need to learn the material and use your time wisely, but those who pass generally are the ones who spend the time needed to do the work to learn the material.

You are responsible for all material covered in this Syllabus and in class, in assigned readings, and on homework assignments. Not all material on tests will necessarily be covered in class but will be in the assignments. The use of cell phones, headphones, etc. is not permitted in class or exams.

Disabilities Policy: (ARC)

Contact Equal Access Services at 925-8560 to schedule an appointment. Click Here!

The Center for Academic Learning

The Learning Center is open Monday – Friday with evening hours Monday – Thursday To schedule an appointment or for additional information call (505)-925-8907 Click Here!

UNM Valencia Registrar's Office

Contact Registration Office by calling 925-8580 Click Here!

UNM Deadlines & Academic Calendar

UNM Deadlines:Click Here!And.... Academic Calendar:Click Here!

Library

We have a library at UNM-Valencia. You should already know where the library is.

Chapters of Book

These are the topics that we are going to learn in this semester.

Chapter F: F.1 (Distance/Midpoint) & F.2 (Intercepts) & F.3 (Lines) & F.4 (Circles)

Chapter 1: 1.1 (Functions) & 1.2 (Graph of a Function) & 1.3 (Properties of Functions) & 1.4 (Library of Functions/Piecewise Defined Functions) & 1.5 (Transformations)

Chapter 2: 2.1 (Linear Functions) & 2.3 (Quadratic Functions) & 2.4 (Properties of Quadratic Functions) & 2.5 (Quadratic Inequalities) & 2.6 (Quadratic Models) & 2.8 (Absolute Value)

Chapter 3: 3.1 (Polynomial Functions) & 3.4 (Rational Functions) & 3.5 (Graph of a Rational Function) & 3.6 (Polynomial and Rational Inequalities)

Chapter 4: 4.1 (Composite Functions) & 4.2 (Inverse Functions) & 4.3 (Exponential Functions) & 4.4 (Log Functions) & 4.5 (Properties of Logs) & 4.5 (Log and Exponential Equations) & 4.7 (Financial Models) & 4.8 (Exponential Growth and Decay)

Math 1220 Schedule

Fall 2020 Math 1220 Schedule (subject to change if necessary)
Week of Material Covered Notes

- F1-F.2 (Distance/Midpoint/Intercepts)
- F.3 (Lines)
- F.4 (Circles)
- 1.1 Functions
- 1.2 (Graph of F^n)& 1.3 (Properties F^n)
- 1.4 (Library of F^n) & 1.4 (Piecewise)
- 1.5 (Transformations)
- 1.5 (Transformations)

Written work/ Project 01 due Exam 01 on Monday September 21^{st}

Written Work01 Due Sep/21, 8 am

- 2.1 (Linear) & 2.3 (Quadratic Zeroes)
- 2.4 (Properties of Quadratic)
- 2.5 (Quadratic Inequalities)
- 2.6 (Quadratic Models) & 2.8 (Abs Value)
- 3.1 (Polynomials)
- 3.4 (Rational)
- No Topic: Break: March 15 to 20 No Topic: Break: March 15 to 20
- 3.5 (Graph of a Rational Function)
- 3.6 (Rational Inequalities)

Written work/ Project 02 due Exam 02 on Monday November 2^{nd}

Written Work02 Due Nov/02, 8 am

- 4.1 (Composition)
- 4.2 (Inverses)
- 4.3 (Exponential)
- 4.4 (Log Functions)
- 4.5 (Properties of Log)
- 4.6 (Log)
- 4.6 (Exponential Equations)
- 4.7 (Financial Models)
- 4.8 (Exponential Growth and Decay)

Written work/ Project 03 due Cumulative Final Exam Written Work03 Due Dec/07, 8 am Monday December 7^{th}