



Syllabus-Spring 2020

Title of Course-Section:	MATH 1230-550 (Trigonometry)
Name of Department:	Mathematic, Engineering, & Computer Science
Instructor:	Andisheh Dadashi, Assistant Prof. of Mathematics
E-Mail:	andisheh@unm.edu
Class Meeting Days/Times:	Lecture: Belen Highschool
Credit Hours :	3 credit hours
Class Location:	Belen High School
Office Location:	VAAS-105
Office Hours:	M: 12:00 pm to 1:00 pm (at LRC) T: 12:00 pm to 3:15 pm (my office) R: 12:00 pm to 1:45 pm (my office) 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.

**** 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 1230-502**

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.

- 1) Course Agreement
 - 1.a) Where to find the Course Agreement form
 - 1.b) Where to send or submit the filled Course Agreement form
 - 1.c) Print the Course Agreement form
- 2) Learning Objectives and Outcomes
- 3) My expectation of your behavior during the lectures
- 4) Sign up to Slack
 - 4.a) Instructors Availability on Slack or Via email
 - 4.b) Messaging & Channels on Slack
- 5) Course Outline
 - 5.a) Where to purchase Access Code for the Pearson
 - 5.b) How to register for the Pearson (Student Instruction)
 - 5.c) Where do you find your e-book
 - 5.d) Temporary Access for the Pearson
 - 5.e) Pearson Support
- 6) Evaluation/Grading Methods
 - 6.a) Overall Grade and Letter Grade
 - 6.b) Where do you find your grade
- 7) Written Work or Written Assignment
 - 7.a) Where do you find the Written Assignment?
 - 7.b) Where do you submit the Written Assignment?
 - 7.c) Written Assignment - Due Dates
- 8) In-Class Exams
- 9) Teaching Materials
- 10) UNM Learn (Blackboard)
- 11) Calculator
- 12) General Support for this course!
- 13) Student Behavior & Collegial Behavior
- 14) Academic Dishonesty
- 15) UNM Valencia Title IX Representative
- 16) Responsibility
- 17) Chapters of Book
- 18) Course Schedule
- 19) Disabilities Policy (ARC)
- 20) The Center for Academic Learning
- 21) UNM-Valencia Registrar's Office
- 22) UNM Deadlines & Academic Calendar
- 23) UNM-Valencia Library

Course Agreement

Please, read this Syllabus thoroughly and fill the course agreement form by end of the first week to receive credit. By signing the course agreement you agree that you have accepted all the rules and regulations in this Syllabus and you will be responsible for missing any material mentioned and required to be successful in this class.

Where to find the Course Agreement form? You can find the course agreement form "[Click Here!](#)"

Where to send or submit the filled Course Agreement form

After printing out the form and filling the form with requested information, please, Scan the filled form and send the scanned file to me on Slack. Information regarding Slack "[Click Here!](#)".

What is Trigonometry

Definition of the trigonometric functions, radiant and degree measure, graphs, basic trigonometric identities, inverse trigonometric functions, complex numbers, polar coordinates and graphs, vectors in 2 dimensions. May be taken concurrently with 1240.

In this course, we are going to study the trigonometric functions. Trigonometric functions are functions related to angles. They show in many areas including engineering, physics and, of course, mathematics.

Pre-requisites/Co-requisites: 1220 or ACT Math ≥ 25 or SAT Math Section ≥ 590 or ACCU-PLACER Next-Generation Advanced Algebra and Functions = 249 – 283.

- Course Goal 1: Communication Addresses UNM Core Area 2/HED Area II: Mathematics (Algebra Competencies)

- SLO 1: Use correct mathematical notation and terminology. – SLO 2: Read and interpret graphs.

- Course Goal 2: Trigonometry of Real Numbers Addresses UNM Core Area 2/HED Area II: Mathematics (Algebra Competencies)

- SLO 1: Students will be able to use the unit circle to define the six trigonometric functions. – SLO 2: Students will be able to graph the sine, cosine, and tangent functions.

- SLO 3: Students will be able to fit a sine or cosine function to a given graph.

- Course Goal 3: Trigonometry of Angles Addresses UNM Core Area 2/HED Area II: Mathematics (Algebra Competencies)

- SLO1: Students will be able to work with radians and to solve circular motion problems.

- SLO 2: Students will be able to solve right triangles. They will be able to draw a sketch in an applied problem when necessary.

- SLO 3: Students will be able to solve non-right triangles using the law of sines and the law of cosines.

- Course goal 4: Analytic Trigonometry Addresses UNM Core Area 2/HED Area II: Mathematics (Algebra Competencies)

- SLO 1: Students will be able to prove trigonometric identities.

- SLO 2: Students will be able to apply addition and subtraction, double-angle and half angle formulas.

- SLO 3: Students will be able to graph the inverse sine, cosine, and tangent functions.

- SLO 4: Students will be able to solve problems that require the inverse trigonometric functions.

- SLO 5: Students will be able to solve trigonometric equations. These may require the formulas outlined in SLO 2. SLO 6: Students will be able to work with the trigonometric form of complex numbers. This includes DeMoivre's formula.

- SLO 7: Students will be able to work with the Euler form of complex numbers.

- SLO 8: Students will be able to add and subtract vectors in two dimensions. They will be able to use the dot product to project one vector onto another and to determine the angle between two vectors. They will be able to solve a variety of word problems using vectors.

- Course goal 5: Analytic Geometry Addresses UNM Core Area 2/HED Area II: Mathematics (Algebra Competencies)

- SLO 1: Students will be able to work with polar coordinates; this includes graphing in polar coordinates and transforming an equation with polar coordinates into one with rectangular coordinates, and vice versa.

- SLO 2: Students will be able to graph parametric equations in two dimensions that involve trigonometric functions.

My expectation of your behavior during the lectures

Here are the reasons I may ask you to leave the classroom *and/or* drop the class:

- If you miss the first week of the semester.
- If you have 3 or more absences during the first three weeks of the semester.
- If you are not registered in Sapling, Slack, and have not turned in the course agreement. "[Click Here!](#)"
- If you are not completing assignments by the end of the first month you are in the class.
- If your comments during the lectures are inappropriate and are interrupting the learning of the other students.
- If you cause a distraction for your teacher or the other students during the lectures.
- If you constantly work on your phone or laptop during the lectures and you are not required to. (Phones must be out of sight)
- Note: You're not allowed to work on your phone or laptop during the class unless I asked you to use your electronic device.
- Note: If you added late, your counted absences start the day you registered for the class.

Sign up to Slack

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.

You can join our MATH1230 Slack group by following the link below to sign up using your **UNM-Email**: [Join Slack](#)

As soon as you click on the above 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 the way 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 5 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 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 and reports with me through a private message by clicking on my name on the left side of the workplace.

Public Channels: Announcements, General, Written-Work, Trigonometry, Notes.

Evaluation/Grading Methods

Your final grade in this class is based on the following components:

Assignments (Approximately 8 Written Homework)	20 %
Midterm	20 %
Final Exam	20 %
This will be the 60% of your overall grade.	60 %

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 is 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	To	Grade	From	To	Grade	From	To
A+	98	100	B+	88	89.99	C+	78	79.99
A	93	97.99	B	83	87.99	C	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

Required Book: .

- Precalculus: Mathematics for Calculus, 7th Edition, by Stewart, Redlin, and Watson
- [WebAssign](#) access is *not* required for the course, but is useful for accessing supplemental textbook resources and the eText. Class Key: **unm 3940 9866**

Written Work or Written Assignment

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

There will be approximately 7 written work through out the semester. Each Written work is consist of almost 15 questions. To receive credit for the questions you must show your work.

You must begin working on your written work 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 will download it on a PC or laptop as a pdf and print it out.

Where do you submit the Written Work?

When you finish your written work and have responded to or filled all the required parts, you will scan your written work 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 in public channels)

If you like to send a picture of your written work,

1. you must organize all the pictures in order from the first question to the last.
2. Pictures must be clear and not blurry or very small.
3. You are responsible to make sure I received your written assignment so check them to see if they are already sent before the due date.

Written Work 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 is accepted to be fair to all the students who work very hard.

In-Class

There are In-Class exams throughout this course: Exam 1, and Final

You can find the due dates here in "[Course Schedule](#)"

No notes or calculators will be allowed on the final. You have to show all your work and use proper mathematical notation to receive full credit. A correct answer without work will receive 0 points.

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?

- You can find my lectures note/ Pdf in the Notes Channel on Slack.
- 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.
- 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!](#)
- There are Math videos provided by publisher for each chapter. These videos will help you to enhance your learning.
- 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.
- 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!](#)

Student Behavior & Collegial Behavior

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.

1 Tentative Schedule

Week	Date	Day	Topics
1	Jan	Mon	Introduction, 1.8 (Inequalities)
	Jan	Tue	2.2(Graphs of Functions)
	Jan	Wed	2.4(Average Rate of Change of a Function)
	Jan	Thu	2.6(Transformations of Functions)
2	Jan	Mon	2.7(Combining Functions)
	Jan	Tue	2.8 (One-to-One Functions and Their Inverses)
	Jan	Wed	2.8 (One-to-One Functions and Their Inverses)
	Jan	Thu	3.1 (Quadratic Functions and Models)
3	Feb	Mon	3.1 (Quadratic Functions and Models)
	Feb	Tue	3.2(Polynomial Functions and Their Graphs)
	Feb	Wed	3.2(Polynomial Functions and Their Graphs)
	Feb	Thu	3.6(Rational Functions)
4	Feb	Mon	3.6(Rational Functions)
	Feb	Tue	4.1 (Exponential Functions)
	Feb	Wed	4.1 (Exponential Functions)
	Feb	Thu	4.2(The Natural Exponential Function)
5	Feb	Mon	4.3(Logarithmic Functions)
	Feb	Tue	4.4(Laws of Logarithms)
	Feb	Wed	4.5(Exponential and Logarithmic Equations)
	Feb	Thu	4.6(Modeling with Exponential Functions)
6	Feb	Mon	5.1(The Unit Circle)
	Feb	Tue	5.2(Trigonometric Functions of Real Numbers)
	Feb	Wed	5.3(Trigonometric Graphs)
	Feb	Thu	5.4(More Trigonometric Graphs)
7	March	Mon	Spring Break
	March	Tue	Spring Break
	March	Wed	5.5(Inverse Trigonometric Functions)
	March	Thu	Review for the Midterm
8	March	Mon	Review for the Midterm
	March	Tue	Review for the Midterm
	March	Wed	Midterm
	March	Thu	6.1(Angle Measure)
9	March	Mon	6.2(Trigonometry of Right Triangles)
	March	Tue	6.3(Trigonometric Functions of Angles)
	March	Wed	6.4(Inverse Trigonometric Functions)
	March	Thu	6.4(Right Triangles)
10	March	Mon	6.5(The Law of Sines)
	March	Tue	6.6 (The Law of Cosines)
	March	Wed	7.1(Trigonometric Identities)
	March	Thu	7.2(Addition and Subtraction Formulas)
11	March	Mon	7.3(Double-Angle, Half-Angle)
	March	Tue	7.3(and Product-Sum Formulas)
	Apr	Wed	7.4(Basic Trigonometric Equations)
	Apr	Thu	7.4(Basic Trigonometric Equations)

Week	Date	Day	Topics
12	Apr	Mon	7.5(More Trigonometric Equations)
	Apr	Tue	8.1(Polar Coordinates)
	Apr	Wed	8.1(Polar Coordinates)
	Apr	Thu	8.3(Polar Form of Complex Numbers)
13	Apr	Mon	8.3(De Moivre's Theorem)
	Apr	Tue	8.4(Plane Curves)
	Apr	Wed	8.4(Parametric Equations)
	Apr	Thu	8.4(Plane Curves and Parametric Equations)
14	Apr	Mon	13.1(Finding Limits Numerically and Graphically)
	Apr	Tue	13.1(Finding Limits Numerically and Graphically)
	AprApr	Wed	13.2 (Finding Limits Algebraically)
	Apr	Thu	13.2 (Finding Limits Algebraically)
15	May	Mon	13.2 (Finding Limits Algebraically)
	May	Tue	13.3(Tangent Lines and Derivatives)
	May	Wed	13.4(Limits at Infinity; Limits of Sequences)
	May	Thu	13.4(Limits at Infinity; Limits of Sequences)
16	May	Mon	Review for the Final
	May	Tue	Review for the Final
	May	Wed	Final Exam on Thursday May 14th



Print this agreement so you can answer the questions while you read through the syllabus. Once you have it completed, sign and date it at the bottom, then send it to me in Slack before the due date in order to receive your credit.

1. What is your Course name, course number and the section number?
2. Have you installed a free QR scanner app on your smartphone?
3. Do you know that your instructor uses QR scanner for the attendance and Class report?
4. How did you purchase the required Package's Access Code, at the bookstore or online?
5. Do you know that you must only use your UNM-email for the SLACK and package enrollment?
6. Are you aware of the temporary access on the Package for the online assignments?
7. What percent of your overall grade is your assignments?
8. I understand that if I don't submit a due tasks before the due date I will receive zero for that task.
— — — — — (initial)
9. I understand that my absence can have a negative effect on my final grade. — — — — — (initial)
10. I understand that if I cause distraction for my instructor and the other students during the class I will be dropped from the class. — — — — — (initial)
11. I understand that I must keep my laptop or cellphone silent and out of sight during the lecture otherwise I will be dropped from the class. — — — — — (initial)
12. I understand that the schedule in this syllabus is subjected to change. — — — — — (initial)
13. I understand that I need to find the due dates for all the activities and finish all the tasks on time and before the due date otherwise I receive zero. — — — — — (initial)
14. I understand that I must use the UNM email for any app or package registration. — — — — — (initial)
15. I understand that I must check my emails frequently and I am responsible for any announcements through Slack or my email. — — — — — (initial)
16. I understand that I need to set aside 6 to 9 hours or so per week for this course. — — — — — (initial)
17. I understand that I need to start reviewing as soon as instructor begins teaching the topics so I can ask my questions during the class or during the office hours — — — — —(initial)
18. I understand where and how I can get help when I need it. — — — — — (initial)
19. I understand that by signing this agreement I am responsible for all the material covered in the Syllabus.
— — — — — (initial)
20. I understand that I have to sign and submit this agreement by the requested time to receive credit.
— — — — — (initial)

Name: — — — — — UNMID: — — — — —

Date: — — — — — Signature: — — — — —