Syllabus-Fall 2019

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:	Lecture: Belen Highschool
Credit Hours and Contact Hours:	3 credit hours
Class Location:	Belen Highschool
Office Location:	VAAS-105
Office Hours:	M: 10:20 am to 11:20 am (at the LRC) W: 10:20 am to 11:20 am (my office) MW: 11:30 am to 12:30 pm (my office) TR: 3:15 pm to 4:15 pm (my office) or by appointment

What is College Algebra

College algebra courses review elementary algebra concepts that were introduced in high school, such as set operations, factoring, linear equations, quadratic equations, exponents, radicals, polynomials, rational expressions, rectangular coordinates, ratios and proportions.

Pre-requisites/Co-requisites

Preparation for MATH 150 and 180. The study of equations, functions and graphs, especially linear and quadratic functions. Introduction to polynomial, rational, exponential and logarithmic functions. Applications involving simple geometric objects. Emphasizes algebraic problem-solving skills. Meets New Mexico Lower-Division General Education Common Core Curriculum Area II: Mathematics (NMCCN 1113). (I) Prerequisite: (101 and 102 and 103) or (118 and 119) or 120 or ACT Math =>22 or SAT Math Section =>540 or ACCUPLACER Elementary Algebra =104-120 or ACCUPLACER College-Level Math =37-68.

Learning Objectives and Outcomes

A complete list of the Student Learning Objectives for this course is given at the end of this syllabus.

** 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

Besides, you should only contact me with your **UNM e-mail**.

I **CANNOT** respond to your email if you don't follow this instruction.

Check your UNM email **frequently**. You are responsible for missing any announcement I sent via email.

Attendance/Absence

- **Attendance:** You are expected to be on time to each class and stay the entire class, have the necessary course materials on hand, and participate in the lecture and/or group activities to receive full credit for attendance each day. Please, put your initial in the sign sheet provided to you!

- **Absences:** I do not require you to give me any sort of documentation for missing up to 3 class days. Even if you miss class, you are still expected to complete the assignments posted in MML. You will only be excused for any in-class activity we did.

Here are the reasons I may **drop** you from 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 MML and completing assignments by the end of the first week you are in the class.
- 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 MATH1220 Slack group by following the link below to sign up using your **UNM-Email**:

https://join.slack.com/t/belen-highschool-math/shared_invite/enQtNzI2Mzk4NjA2NTE5LTA0MDY0NWMyMDM4OTAzYTZlNjFmNDA2ZjJkNTBhZWViZTFhNTkzNDQ1NzhiMjMxNTRjYWEzNzFhZDY1OWYzZjE

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

Course Outline

Text(s) & Supporting Materials: "**College Algebra: Concepts Through Functions" 4th Edition**
Author(s): Sullivan III, Michael | Sullivan, Michael.

Teaching method Partly on-line using Pearson Package:
After you buy the access code from UNMbookstore, you will sign in through the website below using this dadashi82208: **http://www.pearsonmylabandmastering.com/northamerica/**

A. To register for our course:
1. Go to www.pearson.com/mylab
2. Under Register, select **Student**.
3. Confirm you have the information needed, then select **OK! Register now**.
4. Enter your instructor's course ID: dadashi82208, and **Continue**.
5. Enter your existing Pearson account **username** and **password** to **Sign In**.

➢ You have an account if you have ever used a Pearson MyLab & Mastering product, such as MyMathLab, MyITLab, MySpanishLab, MasteringBiology or MasteringPhysics.
➢ If you don't have an account, select **Create** and complete the required fields.

6. Select an access option.

➢ Enter the access code that came with your textbook or was purchased separately from the bookstore.
➢ Buy access using a credit card or PayPal account.
➢ If available, get temporary access by selecting the link near the bottom of the page.

7. From the You're Done! page, select **Go to My Courses**
8. On the My Courses page, select the course name "Intermediate Algebra" to start your work.

B. To Sign in later:

1. Go to www.pearson.com/mylab
2. Select **Sign In**.
3. Enter your Pearson account **username** and **password,** and **Sign In**.
4. Select the course name "**Intermediate Algebra Math 1220" (Fall 2019)** to start your work.

Temporary Access:

If you are not able to purchase Pearson access code right away, you can have temporary access to our online Pearson course using the temporary access while you're following the instruction above. The temporary access starts on the first day of class and expires after 15 days.
When you purchase the access code you can continue your access to the Pearson. In this case, you must continue using the same email address **(UNM-Email)** that you were using to get the temporary access otherwise you will lose your work on Pearson.

C. To upgrade temporary access to full access:

1. Go to www.pearson.com/mylab
2. Select **Sign In**.
3. Enter your Pearson account **username** and **password,** and **Sign In**.
4. Select **Upgrade access** for **College Algebra Math 121 (Spring 2019 Online).**
5. Enter an access code or buy access with a credit card or PayPal account.

Required:

Appropriate MyMathLab (MML) access code (do not purchase a generic code, in this case the code is book specific). You may purchase the 18-week access code for a lower price, but you *cannot* upgrade to the lifetime code once you purchase the restricted one.

Optional:

You may "upgrade" your access by purchasing a hardcopy of the book directly from Pearson for an additional cost (between $50 and $60 before tax). There will be copies of the book on reserve for use in the library (you will not be able to take the book from the library home).

Other Requirements:

- Reliable access to a computer or tablet, and Internet. A computer (laptop or desktop) is recommended. Preferred browsers are Chrome, Firefox, or Safari. Preferred operating systems are Windows or Apple.
- Administrative rights to download free software or plug-ins or add-ons on the computer you plan to use for this course. The first time you login to the MyMathLab (MML) homepage run the Installation Wizard to make sure you have all the appropriate software installed. Also, make sure you are allowing popups.
- Pearson account. If you have used any of the Pearson My Lab products before, you can use the same account you created the first time you used it. Otherwise, you can create an account when you register in MyMathLab (MML) for this class. Register by going to mymathlab.com.
- Access to UNM Learn. will use your UNM NetID to log into UNM Learn. You may access it directly via learn.unm.edu
- Standard or Scientific calculator. This cannot be an app on your cell phone.
- Adobe Reader (a free download), preferably version 11.0 or better.

Lecture Notes and Power points

You can find the **lectures note/ Pdf** in UNM Learn. On the homepage, you can find the sections for the Notes. There are some **PowerPoint** slides on the home page of Pearson provided by the publisher you may find useful. You can find them all in the "Accessible Resources" on the left side of the homepage on Pearson.

You can find "**Tools for Success**" on the left side of the home page on Pearson. In this section you can find all the help you need to start on your assessments on Pearson.
UNM Learn (Blackboard): Course information including this syllabus, course agreement, some necessary links and etc. will be available via Blackboard

Evaluation/Grading Methods

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

Online or Written Homework (Will be uploaded to Slack)	20 %
First in-class exam	10 %
Second in-class exam	10 %
Cumulative Final in-class Exam	20 %

Note: You must score at least a **70% on the final exam** *and* have a course average of 70% or better (700 or more total points) to earn a passing grade in the course.
Overall Grades: pluses and minuses may or may not be added to letter grades at the instructor's discretion. Grades of A+ are extremely rare and will only be awarded for exceptional work.

Grade	From	To		Final Exam Score
A	90	Above	&	70% or better
B	80%	89%	&	70% or better
C	70%	79%	&	70% or better
CR	70%	Better	&	70% or better
D	60%	69%	&	Any
F	Less	59%	&	Any
NC	69%	Less	&	Any

DO NOT consider any of the grades posted in MyMathLab as representing your actual grade.

Assignments

Written homework:
Each unit will have a separate written homework. These written assignments must be completed not later than beginning of class of the next week for full credit. The due dates will be assigned when the homework is posted for each unit. All homework assignment together worth 20% of your overall grade.
After the **due dates**, no assignment is accepted! This method keeps us up to date with our assignments and not letting ourselves get behind. Please, don't ask for an extension because it won't be fair to other students who are always on time.

How to upload your written Assignments

You must upload your written assignments on **Slack** (in the private message and not in the public channel) by or before the due dates. If you are done with your assignments right on the due date and you don't have an access to a scanner you can use your cellphone to upload the assignments to the Slack.

If you consider your uploaded assignment vague or not easy to read you need to upload your assignments again as soon as you have access to the scanner.

In-Class Exams

There will be two exams during the semester that will be written exams given during class. All exams together worth 40% of the overall grade. If you are ill or an unexpected event happens, and you cannot make it to the exam, you have one week to make it up.

You can see the dates of In-class exams in the last page of this Pdf. All exams are closed book closed notes. For the in-class exams to get full credit on graded work you must address all mathematical components presented by the problem, showing all steps and calculations. The use of proper notation, well-structured procedures, and legibility will be considered when assigning points.

Missed Exams: If you know you are going to miss an exam you must make prior arrangements with me in order to take a make-up exam in the testing center. If you miss an exam due to an emergency you must provide documentation of the emergency (doctor's note, police report, etc.) to take a make-up exam.

Calculator

A scientific and graphical calculator may be used on all homework and exams. Use of cell phone calculators or calculators on other WIFI-capable devices is not allowed on exams.

Deadlines

http://registrar.unm.edu/semester-deadline-dates/fall-2019.html

Support!

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

- Ask My Instructor: Please use the Ask My Instructor button in MyMathLab. This button is available in the computational assignments and in the quizzes and sends a message to my email with a link to the question. Do not just send the link, tell me where in the problem you are struggling.
- Office Hours: See my office hours listed at the beginning of this syllabus. 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.
- Student Services: There are various services provided in our Student Services Department. See below about equal access. Also, we have a testing center, advising, and career placement available: Valencia Student Services

Student 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:

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

Collegial Behavior:

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.

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:
https://policy.unm.edu/regents-policies/section-4/4-8.html. 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
http://dos.unm.edu/student-conduct/academic-integrityhonesty.html

Disabilities Policy: (ARC)

https://valencia.unm.edu/students/advisement/equal-access-faqs.html
Contact Equal Access Services at 925-8560 to schedule an appointment.

The Center for Academic Learning

https://valencia.unm.edu/campus-resources/the-learning-center/index.html
The Learning Center is open Monday – Friday with evening hours Monday – Thursday
To schedule an appointment or for additional information call (505)-925-8907

UNM Valencia Registrar's Office

https://valencia.unm.edu/academics/catalog/2018-2019/admission-registration/index.html
Contact Registration Office by calling 925-8580

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:

https://policy.unm.edu/university-policies/2000/2740.html
https://oeo.unm.edu/title-ix/index.html
https://valencia.unm.edu/students/student%20grievance%20procedure.html

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.

Chapters of Book		
Chapter F: sections 1 - 4 Chapter 1: sections 1 - 5	Chapter 2: sections 1, 3, 4, 5, 7 Chapter 3: sections 1 - 5	Chapter 4: sections 1 - 8

Unit	Contents	Homework due dates (Subject to change)
1	F.1-F.2	9/2
2	F.3-F.4, 6.1	9/9
3	1.1-1.2	9/16
4	1.3-1.5	9/23
5	2.1	9/30
6	2.3-2.4	10/14
7	2.5, 2.7	10/21
8	3.1-3.3	10/28
9	3.4-3.5	11/04
10	4.1-4.3	11/18
11	4.4-4.5	11/25
12	4.6-4.8	12/2

Week	Dates	Unit/Exam
1	8/19-8/23	
2	8/26-8/30	1
3	9/2-9/6	2
4	9/9-9/13	3
5	9/16-9/20	4
6	9/23-9/27	5
7	9/30-10/4	Exam 1 and review
8	10/7-10/11	6
9	10/14-10/18	7
10	10/21-10/25	8
11	10/28-11/1	9
12	11/4-11/8	Exam 2 and review
13	11/11-11/15	10
14	11/18-11/22	11
15	11/25-11/29	12
16	12/2-12/6	Review for final
17	12/9-12/13	Final Exam

Table of Contents

F. Foundations: A Prelude to Functions
F.1 The Distance and Midpoint Formulas
F.2 Graphs of Equations in Two Variables; Intercepts; Symmetry
F.3 Lines
F.4 Circles

1. Functions and Their Graphs
1.1 Functions
1.2 The Graph of a Function
1.3 Properties of Functions
1.4 Library of Functions; Piecewise-defined Functions
1.5 Graphing Techniques: Transformations

2. Linear and Quadratic Functions
2.1 Properties of Linear Functions and Linear Models
2.3 Quadratic Functions and Their Zeros
2.4 Properties of Quadratic Functions
2.5 Inequalities Involving Quadratic Functions
2.7 Complex Zeros of a Quadratic Function

3. Polynomial and Rational Functions
3.1 Polynomial Functions and Models
3.2 The Real Zeros of a Polynomial Function
3.3 Complex Zeros; Fundamental Theorem of Algebra
3.4 Properties of Rational Functions
3.5 The Graph of a Rational Function

4. Exponential and Logarithmic Functions
4.1 Composite Functions
4.2 One-to-One Functions; Inverse Functions
4.3 Exponential Functions
4.4 Logarithmic Functions
4.5 Properties of Logarithms
4.6 Logarithmic and Exponential Equations
4.7 Compound Interest
4.8 Exponential Growth and Decay; Newton's Law; Logistic Growth and Decay

Here is a list of student learning outcomes for this course.

(A) Understand the concept of a function

(1) Apply the definition of a function.

(2) Identify domain and range. Interpret in context when appropriate.

(3) Use function notation to evaluate functions.

(B) Build New Functions from Existing Functions

(1) Use graphing transformations

(2) Use function arithmetic

(3) Find inverse functions

(C) Build and Analyze Graphs

(1) Understand the relationship between a function's equation, table and graph.

(2) Identify or sketch the following key features of a graph: intercepts; intervals where the function is increasing, decreasing, positive, or negative; relative maximums and minimums; symmetries; slope; vertex; and end behavior.

(3) Create graphs using key features

(4) Write the equation of a function or circle given its graph based on the key features shown. (reverse of above outcome)

(5) Interpret key features of functions in context.

(D) Apply Algebraic Techniques

(1) Evaluate numeric expressions in exact form and find decimal approximations for irrational numbers.

(2) Solve equations and inequalities

(3) Simplify algebraic expressions to analyze functions and graphs