UNM Valencia
MATH 1350-501/502, College Algebra
Fall 2026

Instructor: Michael Gonzales
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Instructor Led Tutoring Hours: Mondays: 1400-1530 Zoom Link, Tuesdays: 1315- 1345 WTC Common Area/Library, Wednesdays: 1300-1400 Zoom Link
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This is a three credit-hour course. Class meets for two 75-minute sessions of direct instruction for fifteen weeks during the Fall 2026 semester. Please plan for a minimum of six hours of out-of-class work (or homework, study, assignment completion, and class preparation) each week

Text: The Basic Practice of Statistics (ninth edition), Achieve Package (e-book). Achieve is the online learning system which accompanies the textbook and includes an e-book. Achieve is required for MATH 1350 (Stat145). If you don't use Achieve, your Achieve Assignments scores will be 0s, which is 30% of your course overall grade. Hard text copies are not required since Achieve includes an e-book. **This course comes with Inclusive Access (IA). You will receive an email that contains instructions for inclusive access to the book via the MyShelf on UNM Learn. Please, read the instructions carefully and follow what is required to have access to the book at a discounted price.**

Course description: This course discusses the fundamentals of descriptive and inferential statis- tics. Students will gain introductions to topics such as descriptive statistics, probability and basic probability models used in statistics, sampling and statistical inference, and techniques for the visual presentation of numerical data. These concepts will be illustrated by examples from a variety of fields. (3 Credit Hours).

Prerequisites: MATH 1130 is NOT a prerequisite for MATH 1350. Successful completion of MATH 1170 or (MATH 1215X and MATH 1215Y) or MATH 1220 or MATH 1230 or MATH 1240 or MATH 1250 or MATH 1430 or MATH 1440 or MATH 1512 or MATH 1522 or MATH 2530, or minimum ACCUPLACER score ≥ 262 (QRAS) or ≥ 233 (A&F), or ACT score ≥ 20, or SAT score ≥ 520.

Course Outcomes: This course is an introductory course in statistics intended for students in a wide variety of areas of study. Topics discussed include displaying and describing data, the normal curve, regression, probability, statistical inference, confidence intervals, and hypothesis tests with applications in the real world. Student Learning Objectives for this

course is given at the end of this syllabus.

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. The preferred operating systems are Windows or Apple.
- Access to UNM Canvas requires use your UNM NetID to log into UNM Canvas. You may access it directly via https://canvas.unm.edu/
- Scientific or Graphing Calculator

Attendance/Participation: You are expected to be on time for each class, stay the entire class, have the necessary course materials on hand, and participate in the lecture or group activities to receive full credit for attendance each day. Points will be deducted for unexcused absences and unexcused tardiness.

- **Absences:** If you know ahead of time you will miss class, send me an email with the date of the absence to receive and excused absence. Arrange before the next class to get notes from a classmate. The student is responsible for the material and information covered in class.

Online Homework (30%): Warning: Achieve will not work with iPad, Phone or these sorts of devices. Also, on some laptops it may ask for some setting. Also, make sure you are allowing popups. Please, follow the instructions showing in error message or if you cannot figure it out contact tech support

The Achieve Learning technical support team can be reached by phone or by webform via the Student Support Community. Here are their hours and contact information:
https://macmillan.force.com/macmillanlearning/s/achieve and Phone: (800) 936-6899

Where do you find your online assignments? You can find your online assignments on Achieve. On the main page, you can scroll down to find all the chapters that we are covering in this class. For each chapter, you will find Homework, Learning Curves, and other resources which are assigned. The due date in front of that. Additionally, these can be found in Canvas. Homework and Learning Curves are the only mandatory online assignments and will be part of your overall grade. (30%)

The rest of the activities are only for your practice and will not count as your grade. For each chapter assignments (Homework) will be assigned in Achieve and will be graded automatically. Points and the number of assignments will vary. For homework, you have five trials and it is not timed.

Labs (15%): Labs will be given in person. They will be taken in person and contain a series of questions based on the most recent one to two chapters that were covered in class. Labs are open note, open book, and will be done in groups. These are meant to be done in class and cannot be taken home to be finished. I will try to announce labs once class ahead of time, but these will not be done on scheduled days to ensure you come to class every day. Labs are due the day they are assigned.

Due Dates: For assignments, you will have an initial due date and a final due date. You can find the due dates on Achieve's main page. When you exceed the initial due date, you will receive a 10% penalty for each day of delay before the final due date. You should be done with your assignments before the final due dates otherwise you will receive a zero. After the final 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 be successful taking your online Assignments: After each lecture read the notes, finish the Learning curves and Stat Tutors (You can find a learning Curve and Stat Tutor for each topic), take the homework. Stat tutors are not part of your grade but if you need more assistance you should go through the Stat tutors. There are also Practice Quizzes that will be available for your practice.

Midterm Exam (25%) and Final Exam (30%): There is a midterm exam and a final exam during the class time period. See the outline for the dates. 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.

Grading: Course Averages: Online Homework 30%, Labs 15%, Midterm Exam 25%, Final Exam 30%. Total: 100%

Grading Scale:

A+: $x > 97\%$	**A:** $93 \leq x \leq 97\%$	**A-:** $90\% \leq x < 93\%$
B+: $87\% \leq x < 90\%$	**B:** $83\% \leq x < 87\%$	**B-:** $80\% \leq x < 83\%$
C+: $77\% \leq x < 80\%$	**C:** $70\% \leq x < 77\%$	
D: $60\% \leq x < 70\%$		
F: $x < 60\%$		

Other Important Information:

Accommodations: UNM is committed to providing equitable access to learning opportunities for students with documented disabilities. As your instructor, it is my objective to facilitate an inclusive classroom setting, in which students have full access and opportunity to participate. To engage in a confidential conversation about the process for requesting reasonable accommodations for this class and/or program, please contact the UNM-Valencia Equal Access Services (Sarah Clawson,

Coordinator), at (505) 925-8840 or by email at sjclawson@unm.edu. Also available is the Accessibility Resource Center at UNM-Albuquerque at arcsrvs@unm.edu or 505-277-3506.

UAP 2720 and 2740. Our classroom and university should foster mutual respect, kindness, and support. If you have concerns about discrimination, harassment, or violence, please seek support and report incidents. Find confidential services at LoboRESPECT Advocacy Center, the Women's Resource Center, and the LGBTQ Resource Center. UNM prohibits discrimination on the basis of sex (including gender, sex stereotyping, gender expression, and gender identity). All instructors are "responsible employees" who must communicate reports of sexual harassment, sexual misconduct and sexual violence to Compliance, Ethics and Equal Opportunity. For more information, please see UAP 2720 and UAP 2740.

Respectful Conduct Expectations: I am committed to building with you a positive classroom environment in which everyone can learn. I reserve the right to intervene and enforce standards of respectful behavior when classroom conduct is inconsistent with university expectations. Interventions and enforcement may include but are not limited to required meetings to discuss classroom expectations, written notification of expectations, and/or removal from a class meeting. Removal from a class meeting will result in an unexcused absence. Three or more unexcused absences may result in permanent removal and a drop from the course (see attendance policy). The University of New Mexico ensures freedom of academic inquiry, free expression and open debate, and a respectful campus through adherence to the following policies: D75: Classroom Conduct, Student Code of Conduct, University Policy 2240 – Respectful Campus, University Policy 2210 – Campus Violence.

Responsible Learning and Academic Honesty: Cheating and plagiarism (academic dishonesty) are often driven by lack of time, desperation, or lack of knowledge about how to identify a source. Communicate with me and ask for help, even at the last minute, rather than risking your academic career by committing academic dishonesty. Academic dishonesty involves claiming that work created by another source is your own original work. It is a Student Code of Conduct violation that can lead to a disciplinary procedure. When you use a resource in work submitted for this class, document how you used it and distinguish clearly between your original work and the material taken from the resource. (Add specifics about acceptable AI usage.)

Generative Artificial Intelligence Use: This course is meant to help you develop and demonstrate key knowledge and skills without the support of generative artificial intelligence (AI) tools for submitted work. Using generative AI to complete submitted coursework in this course will interfere with the advantages in learning and understanding that this course offers you. You are expected to complete submitted work without any generative AI assistance. Prohibited generative AI use includes tools such as ChatGPT, Claude, Gemini, Copilot, Grammarly's generative AI features, AI image generators, AI video or audio generators, AI code generators, AI paraphrasing tools, AI presentation generators, AI design tools, and similar

technologies. The purpose of this course policy is educational, not punitive. The assignments in this course are aligned with specific learning processes and outcomes that support your future learning and expertise. Submitting AI-generated or AI-assisted in this course is inconsistent with course expectations and may violate UNM's academic integrity standards and Student Code of Conduct. If AI use is suspected, I will use submitted coursework, assignment directions, conversations with you about your work and process, and this syllabus to determine whether academic misconduct occurred. If you are unsure if a tool or use is allowed, please ask before submitting the assignment.

Generative AI is a type of AI that refers to technologies that generate text, images, audio, video, code, or other content in response to user prompts. You should acknowledge meaningful generative AI assistance when you submit work. A brief statement is sufficient.
For example:

I used ChatGPT to help brainstorm possible paper topics and revise my introduction for clarity. I reviewed and edited the final version myself.

or

I used Adobe Firefly to generate an illustrative image for my presentation. I revised the slide design myself and verified that the image was appropriate for the assignment.

You do not need to disclose minor uses such as spelling correction, sentence-level grammar correction, citation formatting, basic image cropping, basic color correction, file conversion, or accessibility-related tools related to an accommodation documented with UNM Accessibility Resource Center, unless an assignment specifically requires disclosure.
You remain responsible for the quality and appropriateness of the work you submit, including AI-generated content. You may not use AI to misrepresent your learning, fabricate sources or data, create misleading images or visual evidence, submit work you do not understand, or avoid the intellectual or creative work the assignment is designed to support. UNM's Academic Integrity Guide for Students applies to AI-assisted work.
You should not enter private, confidential, regulated, or sensitive information into AI tools unless the tools and use have been approved by UNM for that purpose. This includes personally identifiable information, peer or instructor created work, nonpublic community data, private chat logs, and images, voice recordings, or likenesses of real people without appropriate permission.
Learning works best when we start from a position of trust. In our course, students are expected to act honestly and responsibly, and I am expected to provide clear guidance about course expectations. On my part, I will also disclose to you how and when I am using generative AI tools with statements like those above. I also hold myself to the same standards of authorship, critical judgement, quality, and integrity that I have outlined in this policy. If you have questions about what constitutes appropriate AI use, please ask.

Citizenship and/or Immigration Status: All students are welcome in this class regardless of citizenship, residency, or immigration status. As your professor, I will respect your privacy if you choose to disclose your status. As for all students in the class, family emergency-related absences are normally excused with reasonable notice to the professor, as noted in the attendance guidelines above. UNM as an institution has made a core commitment to the success of all our students, including members of our undocumented community.

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.

Support:

- Tutoring Hours: See my tutoring 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.
- Resources to support study skill and time management are available through UNM-Valencia Learning Commons (Tutoring). Tutoring is available to you in math, science, writing, and other subjects through the Learning Commons: Learning and STEM Centers and Writing Center. In person tutoring is in these centers in the LRC (the building that also has the library). Tutoring in Zoom and, for writing, through email, is also available.
- If you are making an email appointment with the Writing Center, email your draft to tutor@unm.edu after you fill out the form above. If you have difficulty with the scheduling link above, would like an appointment in a subject not listed at that link, or have a question, email tutor@unm.edu. You'll get answers during business hours Monday through Friday. The webpage, with more details about available hours, is under construction at the moment.
- 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.
- Many students have found that time management workshops or work with peer tutors can help them meet their goals. These and are other resources are available through Pasos, and Student Learning Support at the Center for Teaching and Learning.
- Instructor Response Time: I routinely check the course for postings or emails, Monday (10 am) – Friday (12 pm), and sometimes on the weekend. You can anticipate a 24 to 48-hour response from me, Monday – Thursday. I will try and respond to all weekend (Friday afternoon to Sunday) emails and

postings by noon on Monday or earlier. I prefer all communication through email or Canvas Learn.

Semester Dates and Deadlines:

- Monday, August 17: First day of class, classes available in Canvas
- Friday, August 28, by 5:00 pm: Last day to add a class or to change credit hours or grade mode in LoboWEB.
- Friday, September 4, by 5:00 pm: Last day to drop without "W" grade and with 100% refund on LoboWEB
- Friday, November 6, by 5:00 pm: Last day to drop without Student Services permission on LoboWEB. Will receive "W" grade and will be responsible for tuition for the course.
- Friday, December 4, by 5:00 pm: Last day to drop with the permission form.

MATH 1350 Course Student Learning Outcomes: Upon successful completion of the course, students will be able to:

1. Explain the general concepts of statistics.
    a. Explain and evaluate statistics used in the real world (from a news article, research project, etc.).
    b. Use statistical vocabulary appropriately.
    c. Distinguish between descriptive and inferential statistics.
    d. Distinguish between qualitative and quantitative data.
    e. Distinguish between populations and samples, and parameters and statistics.
    f. Give examples of independent and dependent variables.
2. Presentation and description of data.
    a. Present data graphically using histograms, frequency curves and other statistical graphs.
    b. Interpret graphs of data, including histograms and shapes of distributions.
3. Summarize data using measures of central tendency and variation.
    a. Calculate and interpret the mean, median, and mode to describe data.
    b. Calculate and interpret range, variance, and standard deviation to describe data.
4. Present the concepts of probability.
    a. Interpret basic probabilities.
    b. Calculate probabilities using compound probability rules and the binomial distribution.
    c. Calculate probabilities using the standard normal distribution and relate them to areas under the curve.
    d. Determine if the binomial distribution can be approximated with the normal distribution.
    e. Describe the relationship between the sampling distribution and the population distribution.
    f. Use the central limit theorem to approximate the probability

distribution and calculate probabilities.

5. Compute point and interval estimates.
    a. Determine the confidence interval for a parameter.
    b. Interpret the confidence level and margin of error.
    c. Determine whether a statistical technique is appropriate under stated conditions.
6. Perform hypothesis tests.
    a. Determine whether a statistical test is appropriate under stated conditions.
    b. Identify null and alternative hypothesis.
    c. Perform and interpret statistical tests (e.g., z-test, t-test, one-tailed and two-tailed, one-sample, two-sample) and determine whether data is statistically significant.
    d. State the conclusion of a hypothesis test.
    e. Interpret a p-value as compared to a significance level.
    f. Explain why a test can lead us to reject a null hypothesis, not accept one.
    g. Distinguish between Type I and Type II errors.
7. Analyze data using regression and correlation.
    a. Explain the difference between correlation and causation.
    b. Construct and interpret scatter plots.
    c. Calculate and interpret the linear correlation coefficient.
    d. Determine and use the equation of a least-squares regression line between two variables to make predictions.
    e. Interpret the meaning of the coefficient of determination.
8. Optional topics.
    a. Inter-quartile range, boxplots, stem-and-leaf plots.
    b. Combinations and permutations.
    c. The Poisson distribution.
    d. Statistical power.
    e. Chi-square.
    f. Analysis of variance.

Tentative Schedule

Week	Dates	Sections/Topics	Assignments Due
1	08/17-08/23	Intro Chapter 1	Syllabus Quiz
2	08/24-08/30	Chapter 2	Achieve Chapter 1
3	08/31-09/06	Chapter 12	Achieve Chapter 2
4	09/07-09/13	Chapter 12	
5	09/14-09/20	Chapter 3	Achieve Chapter 12
6	09/21-09/27	Chapter 3 Chapter 14	
7	09/28-10/04	Chapter 14 Review	Achieve Chapter 3
8	10/05-10/11	Midterm Exam	Achieve Chapter 14
9	10/12-10/18	Spring Break	
10	10/19-10/25	Chapter 15	
11	10/26-11/01	Chapter 4	Achieve Chapter 15
12	11/02-11/08	Chapter 5	Achieve Chapter 4
13	11/09-11/15	Chapter 8 Chapter 9	Achieve Chapter 8
14	11/16-11/22	Chapter 16	Achieve Chapter 8&9
15	11/23-11/29	Chapter 17	Achieve Chapter 16
16	11/30-12/06	Chapter 20 Review	Achieve Chapter 17
	12/07-12/13	Final Exams Week	Tuesday, December 8 12:00-2:00