

MATH 1350: Statistics

Instructor

Dr. Ariel Ramirez

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Class Details

Tuesday/Thursday

Class Time: 12-1:15 pm

Room: VACT 101

See RedShelf

Achieve Course ID:

wkb4x6

Tutoring Hours

M/W 10:00 am -12:00 pm

unm.zoom.us

<https://unm.zoom.us/j/91879084949>

T/Th 2:00 pm—3:00 pm

LRC 172



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Course Description

This course discusses the fundamentals of descriptive and inferential statistics. 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 +1215Y) or MATH 1215 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 .

Get To Know Your Professor

Dr. Ariel Ramirez is an Assistant Professor of Mathematics at UNM-Valencia. He has taught college-level mathematics both at the undergraduate and graduate levels since 2000. He grew up in Chicago, IL. He has a Bachelor's degree in Astronomy from The University of Illinois at Urbana-Champaign, a Master's degree in Mathematics from the University of Illinois at Chicago, and a Ph.D. in Mathematics Education from Illinois State University.

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.

Course Materials & Requirements

Textbook and Package:

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 MATH1350 (Stat145). If you don't use Achieve, your Achieve Assignments scores will be 0s, which is 45% of your course overall grade.

Access Code: Achieve Access codes are available from the UNM bookstore, or the publisher (Online), or with a lower price through inclusive access. 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 RedShelf on UNM Learn. Please, read the instructions carefully and follow what is required to have access to the book at a discounted price.

Student Instructions: Follow these steps to get started.

- Go to <https://achieve.macmillanlearning.com/start> to log in or create an account. (Use your UNM-Email)
- If you click on "I need to enroll in a course" you will be prompted to enter the Course ID or Access code
- Course ID: wkb4x6

Where is your e-book? To access your e-book, click on the e-book option on the left sidebar of your course site. Create an account or log in with an existing Macmillan Learning eBook account.

Introduction to Assessments for students on Achieve Learning: Please follow the links below in order to know how to use Achieve learning: Registration information: <https://macmillan.force.com/macmillanlearning/s/>

Achieve slides for LMS integration (inclusive access):

https://docs.google.com/presentation/d/1BgD52St0lr1vYB7AIQYyoc7TvB3q9i_0p1u9EvaF7E/edit#slide=id.g3dbd7ae118_3_10

Classroom Policies

Attendance / Participation (10%)

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.

Absences: If you know ahead of time you will miss a class, send me an email indicating the date of the absence to receive an excused absence.

Arrange before the next class meeting to get notes from a classmate. The student bears full responsibility for the material and information covered in class.

Each student starts with 100 attendance points. Attendance is taken at the **beginning** of class. Seven attendance points are deducted for each unexcused absence; Four attendance points for tardiness.



abogallery.com - Internet's biggest art collection

"Gorge Improvisation" - Kandinsky 1914

Online Homework (30%) & Quizzes (15%)

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> Phone: (800) 936-6899

Classroom Policies

Online Homework (30%) & Quizzes (15%)

Where do you find your online assignment? 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 and Quiz which is assigned and has a due date in front of that.

Homework and Quiz are the only mandatory online assignments and will be part of your overall grade. (45%)

The rest of the activities are only for your practice and will not count as your grade.

For each chapter assignments (Homework and online Quizzes) 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.

For quizzes, you have three trials, for each wrong answer you lose 5% of the question's point, but the quiz is not timed.

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, at the end take the Quiz. Stat tutors are not part of your grade but if you need more assistance you should go through the Stat tutors.

Project (10%)

There is one project assigned during the semester. It will involve gathering your own data set and using some of the concepts discussed in the class to critically examine this data set. Information on the project is given a few weeks into the semester.

The project is worth 10% of your grade. Late projects have a week's grace period and will receive a 20% penalty.

Midterm Exam (15%) & Final Exam (20%)

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:

Attendance/Class Participation (10%)

Online Homework (30%), and online Quizzes (15%)

Project (10%), Midterm (15%), Final Exam (20%)

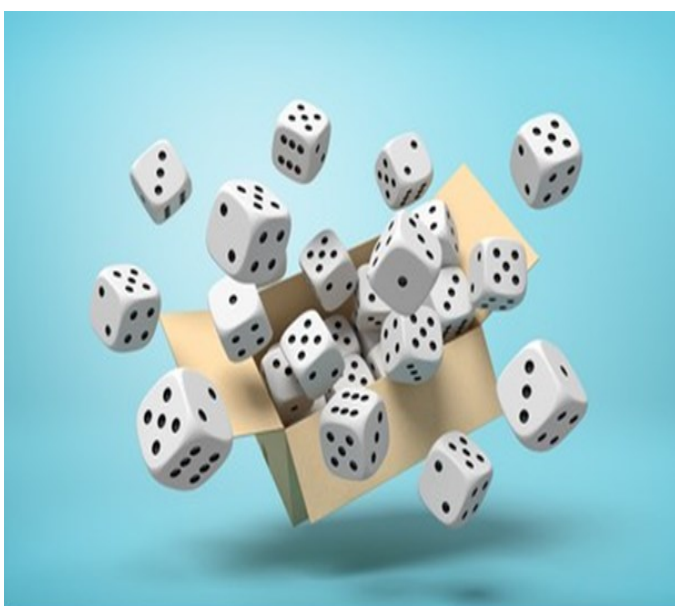
GRADING SCALE: Students in this course will receive the following grades:

| | | | | | |
|----|--------------|---|-------------|----|-------------|
| A+ | [98% – 100%] | A | [93% – 98%] | A- | [90% – 93%] |
| B+ | [88% – 90%] | B | [83% – 88%] | B- | [80% – 83%] |
| C+ | [78% – 80%] | C | [70% – 78%] | | |
| D | [60 – 70%] | F | [0 – 60%] | | |

University Policies

UNM Administrative Mandate on Required Vaccinations

All students, staff, and instructors are required by [UNM Administrative Mandate on Required Vaccinations](#) to be fully vaccinated for COVID-19 as soon as possible, but no later than September 30, 2021, and must provide proof of vaccination or a UNM validated limited exemption or exemption no later than September 30, 2021, to the [UNM vaccination verification site](#). Students seeking medical exemption from the vaccination policy must submit a request to the [UNM verification site](#) for review by the UNM [Accessibility Resource Center](#). Students seeking a religious exemption from the vaccination policy must submit a request for reasonable accommodation to the [UNM verification site](#) for review by the [Compliance, Ethics, and Equal Opportunity Office](#). For further information on the requirement and on limited exemptions and exemptions, see the [UNM Administrative Mandate on Required Vaccinations](#).



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UNM Requirement on Masking in Indoor Spaces

All students, staff, and instructors are required to wear face masks in indoor classes, labs, studios, and meetings on UNM campuses; see [masking requirement](#). Vaccinated and unvaccinated instructors teaching in classrooms must wear a mask when entering and leaving the classroom and when moving around the room. When vaccinated instructors are able to maintain at least six feet of distance, they may choose to remove their masks for increased communication during instruction. Instructors who are not vaccinated (because of an approved medical or religious exemption) or who are not vaccinated yet, must wear their masks at all times. Students who do not wear a mask indoors on UNM campuses can expect to be asked to leave the classroom and to be dropped from a class if failure to wear a mask occurs more than once in that class. Except for the limited cases described above, students and employees who do not wear masks in classrooms and other indoor public spaces on UNM campuses are subject to disciplinary actions.

Communication on change in modality: The university may direct that classes move to remote delivery at any time to preserve the health and safety of the students, instructor, and community. Please check your email and your UNM Learn site regularly for updates about our class, and please check <https://bringbackthepack.unm.edu> regularly for general UNM updates about COVID-19 and the health of our community.

Acceptable masks and mask-wearing in class: A two-layer mask that covers the nose and mouth and is cleaned regularly is acceptable, as are disposable medical masks, KN95, KF94, FFP1, and FFP2 masks. A face shield is not sufficient protection. It is vital that you wear your mask correctly, covering your nose and mouth. Removing your mask for an extended period to eat or drink in class violates the university mask requirement and endangers others.

Consequences of not wearing a mask properly: If you don't wear a mask or do not wear a mask properly by covering your nose and mouth, you will be asked to leave class. If you fail to wear a mask properly on more than one occasion, you can expect to be dropped from the class. If you insist on remaining in the classroom while not wearing a mask, the class will be dismissed for the day to protect others, and you will be dropped from the class.

The instructor will try to have a few disposable masks available in the classroom on a first-come, first-served basis.

University Policies (continued)

Title IX Statement: Our classroom and our university should always be spaces of mutual respect, kindness, and support, without fear of discrimination, harassment, or violence. Should you ever need assistance or have concerns about incidents that violate this principle, please access the resources available to you on campus, especially the LoboRESPECT Advocacy Center and the support services listed on its website (<http://loborespect.unm.edu/>). Please note that, because UNM faculty, TAs, and GAs are considered "responsible employees" by the Department of Education, any disclosure of gender discrimination (including sexual harassment, sexual misconduct, and sexual violence) made to a faculty member, TA, or GA must be reported by that faculty member, TA, or GA to the university's Title IX coordinator at the [Office of Compliance, Ethics, and Equal Opportunity](#). For more information on the campus policy regarding sexual misconduct, please see: <https://policy.unm.edu/university-policies/2000/2740.html>.



Accommodations: In accordance with University Policy 2310 and the Americans with Disabilities Act (ADA), academic accommodations may be made for any student who notifies the instructor of the need for an accommodation. It is imperative that you take the initiative to bring such needs to the instructor's attention, as I am not legally permitted to inquire. Students who may require assistance in emergency evacuations should contact the instructor as to the most appropriate procedures to follow. Contact [Accessibility Resource Center](#) at 277-3506 or arcsrvs@unm.edu for additional information. UNM is committed to providing courses that

are inclusive and accessible for all participants. As your instructor, it is my objective to facilitate an accessible classroom setting, in which students have full access and opportunity. If you are experiencing physical or academic barriers, or concerns related to mental health, physical health and/or COVID-19, please consult with me after class, via email/phone or during office hours. You are also encouraged to contact [Accessibility Resource Center](#) at arcsrvs@unm.edu or by phone 277-3506.

If you are a Valencia campus student, contact Equal Access Services at Valencia Campus at (505)925-8560 or [Valencia Student Services](#). If you are a main campus student you can receive documentation from the main campus Accessibility Resource Center. I will not guarantee accommodation without the appropriate documentation.

Support in Receiving Help: Students who ask for help are successful students. I encourage students to be familiar with services and policies that can help them navigate UNM successfully. Many services exist to help you succeed academically, such as [peer tutoring](#) at CAPS and <http://mentalhealth.unm.edu>. There are plenty of ways to find your place and your pack at UNM: see the "student guide" tab on my.unm, students.unm.edu, or ask me for information about the right resource center or person to contact.

Doing the Right Thing: UNM has policies to preserve and protect you and the academic community available in the [Student Pathfinder](#) as well as in the Faculty Handbook. These include policies on student grievances [D175](#) (undergraduates), academic dishonesty ([D100](#)), and respectful campus ([C09](#)). Please ask for help in understanding and avoiding plagiarism (passing the work or words of others off as your own work or words) or other forms academic dishonesty. Doing something dishonest in a class or on an assignment can lead to serious academic consequences. Come talk with me about your concerns or needs for academic flexibility or talk with support staff at one of our [student resource centers](#) before you do something that may endanger your career.

University Policies (continued)

Copyright Issues

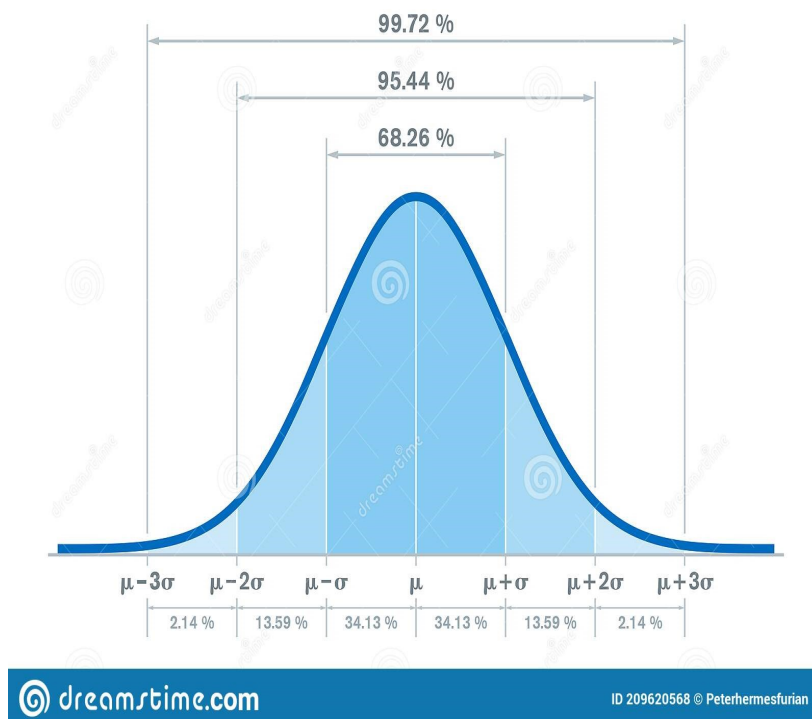
All materials in this course fall under copyright laws and should not be downloaded, distributed, or used by students for any purpose outside this course.

[The UNM Copyright Guide](https://copyright.unm.edu) has additional helpful information on this topic.
<https://copyright.unm.edu>

Accessibility Statements

[Blackboard's Accessibility statement](https://www.blackboard.com/blackboard-accessibility-commitment)
<https://www.blackboard.com/blackboard-accessibility-commitment>

[Microsoft's Accessibility statement](https://www.microsoft.com/en-us/accessibility/)
<https://www.microsoft.com/en-us/accessibility/>



Academic Integrity

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://pathfinder.unm.edu/campus-policies/academic-dishonesty.html> and student code of conduct: <https://pathfinder.unm.edu/code-of-conduct.html>

Any student judged to have engaged in academic dishonesty in course work may receive a reduced or failing grade for the work in question 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.

Student Resources:

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

- Tutoring Hours: See my tutoring hours listed at the beginning of this syllabus.
- Form online study groups: You may work together with other members of our class.
- Free Tutoring: <http://valencia.unm.edu/campus-resources/the-learning-center/learning-center.html>

Math 1350: Intermediate Algebra (Fall 2021) (*Course outline is subject to change*)

| Week | Dates | Sections / Topics | Assignments |
|------|---------------|---|---------------------------------|
| 1 | 8/24 - 8/26 | <i>Intro & Chapter 1</i> | |
| 2 | 8/31 - 9/2 | <i>Chapter 2</i> | |
| | 9/3 | Last day to add a course (5 pm) | |
| 3 | 9/7 - 9/9 | <i>Chapter 2</i> <i>Chapter 12</i> | Achieve Chapter 1 homework due |
| | 9/10 | Last day to drop a course without a grade (5 pm) | |
| 4 | 9/14 - 9/16 | <i>Chapter 12</i> | Achieve Chapter 2 homework due |
| 5 | 9/21 - 9/23 | <i>Chapter 3</i> | Achieve Chapter 12 homework due |
| 6 | 9/28 - 9/30 | <i>Chapter 3</i> <i>Chapter 15</i> | |
| 7 | 10/5 - 10/7 | <i>Chapter 15</i> Review | Achieve Chapter 3 homework due |
| 8 | 10/12 | Midterm Exam #1 | Achieve Chapter 15 homework due |
| | 10/14 - 10/15 | Fall Break | |
| 9 | 10/19 - 10/21 | <i>Chapter 4</i> | |
| 10 | 10/26 - 10/28 | <i>Chapter 4</i> <i>Chapter 5</i> | Achieve Chapter 4 homework due |
| 11 | 11/2 - 11/4 | <i>Chapter 5</i> | |
| 12 | 11/9 - 11/11 | <i>Chapter 8</i> | Achieve Chapter 5 homework due |
| | 11/12 | Last day to drop without Dean's Permission (5 pm) | |
| 13 | 11/16 - 11/18 | <i>Chapter 8</i> <i>Chapter 9</i> | Achieve Chapter 8 homework due |
| 14 | 11/23 | <i>Chapter 9</i> <i>Chapter 16</i> | Achieve Chapter 9 homework due |
| | 11/25 - 11/26 | Thanksgiving Holiday | |
| 15 | 11/30 - 12/2 | <i>Chapter 16</i> <i>Chapter 17</i> | Achieve Chapter 16 homework due |
| 16 | 12/7 - 12/9 | <i>Chapter 17</i> Review | Achieve Chapter 17 homework due |
| | 12/10 | Last day to drop with Dean's permission/change grade mode with form (5 pm) | |
| 17 | 12/14 | Final Exam (12 pm—2pm) | |

Course Student Learning Outcomes

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

A. Demonstrate appropriate use of basic statistics.

1. Students will explain the general concepts of statistics. (Ch 1)
2. Students will presentation and description of data. (Ch 1 & Ch 2)
3. Students will summarize data using measures of central tendency and variation. (Ch 2)
4. Students will present the concepts of probability. (Ch 3)
5. Students will calculate probabilities using the standard normal distribution and relate them to areas under the curve. (Ch 3)
6. Students will give examples of independent and dependent variables. (Ch 4)
7. Students will calculate and interpret the linear correlation coefficient. (Ch 5)
8. Students will analyze data using regression and correlation. (Ch 4 & Ch 5)
9. Students will distinguish between populations and samples, and parameters and statistics. (Ch 15)
10. Students will interpret basic probabilities. (Ch 12)
12. Students will describe the relationship between the sampling distribution and the population distribution. (Ch 15)
13. Students will compute point and interval estimates. (Ch 16)
14. Students will perform hypothesis tests. (Ch 17 & Ch 20)