

Math 101: Mathematics for Social Sciences



Spring 2026 Syllabus

1 Course Details

1.1 Course Description

This course explores voting theory, power indices, fair division, apportionment, circuits and trees, list processing, descriptive statistics, probability.

1.2 Course Meetings

MWF 9:00 AM - 9:50 AM, NUTRIEN 140

1.3 Course Instructor

Dr. Geoff Krall (geoff.krall@colostate.edu)

1.4 Office Hours

If you would like to receive extra support, you may attend walk-in office hours at Mondays at 1pm or make an appointment. My office is in Weber 242.

1.5 Communication

E-mail is the best way to contact your instructor outside of class. You can expect a response within 24 hours on weekdays which either answers your question, or to set up a further meeting to discuss your question. You, in turn, are also expected to check your university email and our Canvas course regularly and respond in a timely manner.

1.6 Textbook

Our eBook can be accessed through the modules. It is entitled *Excursions in Modern Mathematics, 10th ed.* We will be covering the following chapters.

- Chapter 1: Voting Theory
- Chapter 3: Divisions
- Chapter 4: Appointment
- Chapter 7: Circuits and Trees
- Chapter 10: Financial Mathematics
- Chapter 15: Descriptive Statistics

1.7 Course Website

We will use Canvas¹ for all course material and grades. This is a great place to stay organized and know what is due when.

1.8 Calculator and Technology

You should have access to a calculator for arithmetic assistance. A simple four-function or scientific calculator will suffice. You may also use a graphing calculator such as a TI-83 or better.

2 Grades

2.1 Letter Grades

Overall grade percentages will be calculated based on the following weighting:

- Attendance Checks (x6, one dropped) (15%)
- Exams (x4) and Final Project (one dropped) (40%)
- Quizzes (x4) (10%)
- Homework (x10, two dropped) (20%)
- Journals (x6, one dropped) (15%)

Letter grades will be assigned according to a scale no stricter than the following:

A+	[97,100]
A	[90,97)
B+	[87,90)
B	[80, 87)
C+	[77, 80)
C	[70,77)
D	[60,70)
F	[0,60)

3 Assignments and Assessments

3.1 Attendance

Attendance is expected. There will be six random attendance checks throughout the semester. One is dropped.

3.2 Journals

There are six journal prompts offered over the course of the semester. One is dropped.

3.3 Quizzes

There will be four in-person quizzes on Fridays, the week before an exam. The quizzes will be comprised of questions similar to the MyLab Math. Each will have 10 multiple choice questions and is worth 10 points. They will be similarly aligned to the exams the following week.

¹canvas.colostate.edu

3.4 Exams and Final Project

There will be four in-person exams, covering one or two chapters from our textbook. The exams will consist of 15 multiple choice questions and be worth 15 points.

There is also a final project the last week of class. The project can be completed in class and will focus on Chapter 10.

Among the four exams and final project, the lowest score will be dropped.

The exam dates are listed below; please put them in your calendar now, as we are not able to accommodate alternate arrangements.

- Exam 1 (Chapter 1.1-1.6) - Friday, February 13
- Exam 2 (Chapter 4.1-4.2, 4.5-4.6) - Friday, March 6
- Exam 3 (Chapter 3.1-3.3, 3.5-3.6 & 7.1-7.2) - Friday, April 3
- Exam 4 (Chapter 15.1-15.3) - Friday, April 25
- Final Project (Chapter 10.1-10.5) - Wednesday, May 6 and Friday, May 8

3.5 Make-up Assessment Policy

Because all assessments allow for at least one dropped assignment (except Quizzes), make-up assessments or retakes are **not permitted**. However, if you are aware you are going to miss an assessment, please communicate with your instructor ahead of time. Likely, you will take the assessment early in the Weber Testing Center in the Pre-Calculus Center.

Make up or retake assessments cannot occur after the date of the assessment.

4 Course and University Policies and Standards

4.1 CSU COVID Guidance

For the latest information about the University's COVID resources and information, please visit the CSU COVID-19 site².

4.2 Basic Needs Security

Any student who faces challenges securing their food or housing can receive support from the Rams Against Hunger program³. Services include a food pantry, a meal-swipe program, pocket pantries, and in-person assistance with navigating federal aid eligibility. The RAH page includes numerous resources as well as county, state and federal programs which are described and linked. Furthermore, please notify the instructor if you are comfortable in doing so.

4.3 Classroom Behavior, Respect for Diversity and Inclusion

Students and faculty each have responsibility for maintaining an appropriate learning environment. Those who fail to adhere to such behavioral standards may be subject to discipline. Professional courtesy and sensitivity are especially important with respect to individuals and topics dealing with differences of race, color, culture, religion, creed, politics, veteran's status, sexual orientation, gender, gender identity and gender expression, age, disability, and nationalities. Class rosters are provided to the instructor with the student's legal name. I will gladly honor your request to address you by an alternate name or gender pronoun. Please advise me of this preference early in the semester so that I may make appropriate changes to my records. For more information, see the policies on classroom behavior and the student code at the catalog⁴ and at the SRC⁵.

We acknowledge that many students have had experiences that have left them feeling excluded from the field of mathematics. We also acknowledge that students from minority groups have been disproportionately impacted. We are making this explicit statement because this unfortunate reality is inconsistent

² covid.colostate.edu

³ lsc.colostate.edu/slice/slice-engagement/rams-against-hunger/

⁴ catalog.colostate.edu/general-catalog/policies/students-responsibilities

⁵ resolutioncenter.colostate.edu/student-conduct-code/

with the truth that you can be successful in mathematics, regardless of your race, ethnicity, gender, or sexual orientation. We are committed to decolonizing mathematics into a field where every student feels supported in accomplishing the hard work necessary to become better problem solvers. We learn more by listening to diverse perspectives, and we hope you will be ready and willing to share yours in this course.

Here are several resources that highlight the past and current contributions to the mathematics community from underrepresented groups:

1. Meet A Mathematician⁶
2. Mathematically Gifted and Black⁷
3. Lathisms⁸
4. Indigenous Mathematicians⁹
5. Spectra¹⁰
6. Association for Women in Mathematics¹¹
7. Mathematicians of the African Diaspora¹²

4.4 Accommodation of Disabilities

If you are a student who will need accommodations in this class due to a disability or chronic health condition, your instructor will need an accommodation letter from the Student Disability Center (SDC) before they are implemented. Please meet with your instructor during office hours or after class to provide the letter and/or to further discuss your needs.

If you do not already have these letters, please contact the SDC as soon as possible to initiate the accommodation process. The SDC is located in room 121 of the TILT building. Contact them at 970-491-6385 or visit the SDC website¹³.

4.5 Student Parents/Guardians/Caregivers

We realize that student parents/guardians and caregivers face distinctive challenges in succeeding academically, and we are committed to supporting those of you who are parents to achieve our course's learning outcomes. If you encounter challenges in meeting course expectations, please contact us as soon as possible. We will develop a plan together so that you can be successful in the course.

4.6 Student Case Management

Student case management¹⁴ is available to help students with extenuating life circumstances and connect them with resources. In some cases, after we discuss your situation, we may request verifiable documentation for class absences from the SCM office if you request considerations for absences or missed coursework.

4.7 Mental Health and Wellness

CSU is a community that cares. You are not alone. CSU Health Network Counseling Services has trained professionals who can help. Your student fees provide access to a wide range of support services. Call Counseling Services at (970) 491-6053, and they will work together with you to find out which services are right for you. Visit counseling services¹⁵ to learn more and mental health resources¹⁶ for additional

⁶sites.google.com/view/meetamathematician/home

⁷mathematicallygiftedandblack.com/

⁸www.lathisms.org/

⁹www.indigenoussmathematicians.org/

¹⁰lgbtmath.org/

¹¹awm-math.org/

¹²www.mathad.com/home

¹³disabilitycenter.colostate.edu/

¹⁴studentcasemanagement.colostate.edu/

¹⁵health.colostate.edu/about-counseling-services

¹⁶health.colostate.edu/mental-health-resources/

student mental health and well-being resources. If you are concerned about a friend or peer, use Tell Someone by calling (970) 491-1350 or visiting Tell Someone¹⁷ to share your concerns with a professional who can discreetly connect the distressed individual with the proper resources. Rams Take Care of Rams. Reach out and ask for help if you or someone you know is having a difficult time.

4.8 Religious Observances and Class Attendance

CSU has a legal obligation to accommodate students' absences due to religious observances. For such an accommodation, it is the student's responsibility to complete the Religious Accommodation Request Form at the beginning of each semester and submit the request via the Office of the Vice President for Student Affairs website. The Dean of Students will communicate with the instructor regarding the student's absence and the student is instructed to discuss how best to ensure an accommodation related to class conflicts. For religious observances that cannot reasonably be anticipated at the beginning of the semester, students must follow the procedure above as soon as possible after the course conflict is identified. If a student knows that a particular course or section of the course will have multiple conflicts with his or her religious obligations, the student is advised to locate another course section or defer taking the course to a different semester. In the event of a conflict in regards to this policy, individuals may appeal using established CSU procedures. Instructors are obligated to provide reasonable accommodations to ensure compliance with CSU's obligations. See more details regarding attendance policies at the catalog¹⁸

4.9 Discrimination and Harassment

CSU is committed to providing an environment that respects the dignity and worth of every member of its community. CSU strives to create and maintain a work and study environment that is fair, inclusive, and responsible so that each member of the CSU community is treated with dignity and respect and is rewarded for relevant considerations such as ability and performance. CSU has adopted a comprehensive policy to define the types of conduct that are prohibited and to prevent harm arising from discrimination, harassment, sexual harassment, sexual misconduct, domestic violence, dating violence, stalking, and retaliation. Conduct that is discriminatory or harmful under the policy inhibits the achievement of the stated goals. All students, faculty, staff, and other persons having business with CSU are expected to know and follow this policy.

Details regarding what is involved in bringing a complaint and the procedures for informal and formal resolution are available from the Office of Support and Safety Assessment for student-to-student behavior and the Office of Equal Opportunity for matters involving non-students such as faculty, staff, affiliates, or visitors and matters involving a student and non-student person. See more details at the catalog¹⁹.

4.10 Academic Integrity and the Honor Code

This course will adhere to the CSU Academic Integrity Policy as found in the Colorado State University General Catalog and the Student Conduct Code. At a minimum, violations will result in a grading penalty in this course and a report to the Office of Conflict Resolution and Student Conduct Services. See more details in the catalog²⁰ and TILT²¹.

¹⁷supportandsafety.colostate.edu/tell-someone/

¹⁸catalog.colostate.edu/general-catalog/academic-standards/academic-policies/

¹⁹catalog.colostate.edu/general-catalog/policies/discrimination-harassment/

²⁰catalog.colostate.edu/general-catalog/policies/students-responsibilities/#academic-integrity

²¹tilt.colostate.edu/Integrity/Pledge