

Syllabus for MATH2164-008, Fall 2023

Matrices and Linear Algebra

Course Information Summary

Instructor Information

Name: Yuanan Diao, Ph.D
Office: Fretwell 355E
Email: ydiao@uncc.edu
Course website: <http://canvas.uncc.edu/>
Office hours: Tuesday, & Thursday 10:30am – 12:00noon (in person or online via Zoom).

This course has an Attendance Requirement

- **Class Meeting Time:** TR 4:00 – 5:15pm.
- **Classroom:** FRET 106.
- **Online Office Hour Zoom Link:** <https://uncc.zoom.us/j/2573789911>, log on using your NinerNET ID through UNCC's Web Authentication.
- **Polleverywhere link for in class quizzes:** <https://pollev.com/yuanandiao611/>.
- **Course Prerequisite:** MATH 1120 or MATH 1241 with grade of C or above, or permission of the mathematics department.
- **Text Book:** *Matrices and Linear Algebra* by zyBooks.com, an online interactive textbook.

Instruction on how to order the textbook directly from the publisher

(this is recommended because it is faster and more convenient):

1. Sign in or create an account at learn.zybooks.com
2. Enter zyBook code: UNCCMATH2164DiaoFall2023
3. Pay to subscribe, please specify that you are in Section 008.

Course Contents: This course covers the following topics: Systems of linear equations, Matrix algebra, determinants, Euclidean and general vector spaces, linear transformations, eigenvalues and eigenvectors.

Quizzes: There will be daily quizzes whenever the class meets, except on test days. The quizzes are also used to count your attendance. Open the quiz for that day once you have logged on to your Canvas course page to be ready.

Homework Assignments: Daily homework, in the form of Participation Activities and Challenge Activities embedded in the textbook, as well as through WebWork, is required.

Tests: There will be three unit tests and one final exam. The tests will be given at the regular class meeting time except the final on the following dates:

Test 1: September 21, Thursday, 4:00pm – 5:15pm.

Test 2: October 31, Tuesday, 4:00pm – 5:15pm.

Test 3: December 5, Tuesday, 4:00pm – 5:15pm.

Final: December 14, Thursday, 2:00pm – 4:30pm.

Grading Policy: The course will be graded on a scale of 800 total points. Each test is worth 100 points on this scale and the final exam is worth 200 points. The overall Quizzes/attendance average is worth 100 points and the overall homework assignment average is worth 200 points (100 each for WebWork Assignments and Zybook assignments). The following schedule guarantees the minimum grade you will receive if your combined total score x falls in the indicated range.

$720 \leq x \leq 800$ ($\geq 90\%$): A.

$640 \leq x < 720$ (80% to less than 90%): B.

$560 \leq x < 640$ (70% to less than 80%): C.

$480 \leq x < 560$ (60% to less than 70%): D.

$x < 480$ (less than 60%): F.

Changes to the Syllabus: This syllabus may be modified at any time during the semester; however, such changes will be communicated with students in class and updated on the class Canvas page.

Class Announcements: Class announcements are made in class and/or by Canvas announcements. Updates to the class Canvas pages will often be communicated via Canvas notifications, so be sure to have them enabled in your Canvas settings.

The detailed information about the course and its policies can be found in the next few pages, you may want to use the following list of quick links to navigate to an item you want to read.

Quick Links:

Required Equipment

Class Attendance Policy

Office Hours and Email Guidelines

Quizzes and Homework Assignments

Tests and Makeup Work

How to Succeed in This Class

Academic Integrity

Title IX

Religious Accommodation

Student Grievances

Withdrawals

Disability Support Services

Student Support Services

General Course Information and Policies

Required Equipment

- A desktop or laptop computer with Windows 10, 8, or 7 / Mac OS X 10.10 or higher that is capable of handling tests and homework assignments online.
- A broadband internet connection (for doing homework at home).
- An account on Polleverywhere.com: You must create an account using your UNCC credentials at <https://www.polleverywhere.com/>. This is needed for your daily in class quizzes.
- A Ziteboard account: sign up for a free account at <https://ziteboard.com/>. This is a very useful communication tool when you come to my online office hours.

Class Attendance Policy: Class attendance is required and students are required to attend all classes. When absences are necessitated, students are held responsible for the proceedings of the class missed. Failure to attend class or arriving late may impact your ability to achieve course objectives which could affect your course grade. An absence, excused or unexcused, does not relieve you of any course requirement. Regular class attendance is a student's obligation, as is a responsibility for all the work of class meetings, including tests and written tasks.

Students should check their Canvas account regularly for course information and resources. Email notifications and correspondence will be sent to the student's UNCC email. The lecture notes and recorded videos (if any) will be posted in Canvas for students to view.

Office Hours and Email Guidelines: I may leave an office hour session (online or in person) if no one shows up in the first half hour. However, if you plan to come to a session late, please let me know ahead of time so I can wait for you.

My preferred method of contact is by email. Emails will be returned within 48 hours Monday through Friday. I may respond to your emails sometimes even over the weekends, but you should not expect that to be a norm.

Student emails must meet the following guidelines/standards in order to be addressed by the instructor:

- Emails must include your course name and section in the subject line of your email. For example, MATH2164-008.
- Emails must be sent from your formal UNCC email account (or they will not be opened).

Certain emails will not be responded to. These include:

- Request for answers, explanations, or worked steps to homework questions. You must see me in person or via online office hours for assistance with a homework problem. This allows me to see where your mistake is made and saves us both time in helping you to correct the issue.

- Duplicate questions *i.e.* information that is available on the course syllabus or elsewhere on the Canvas site.
- Inappropriate requests. These include requests to the instructor to make unfair exceptions, change or “round up” grades, etc.

Questions and Classroom Behavior: Feel free to bring any questions to class. If there is not enough time to go over all questions during class, feel free to ask me after class, come to my office hours, or email me. Be courteous to your fellow classmates.

While I encourage your active participation in class discussions, including asking questions, I will exercise my responsibility to manage the classroom discussions so that the flow of ideas can proceed in an orderly and timely fashion. If your discussion and/or questions veer off topic, I may cut you off in class; feel free to speak with me outside of class to continue your thought if this occurs. You should also expect that if your conduct during class discussions seriously disrupts the atmosphere of mutual respect I expect in this class, you will not be permitted to participate further.

Quizzes and Homework: There will be quizzes during every class when there is no test scheduled on that day. These are pop up quizzes, designed to capture your attention so the questions are given to the class at random times, usually there will be 4 questions in each class period. These are not hard questions, so if you are paying attention you will not miss them.

Part of your homework assignments are embedded in the textbook and are called “Participation Activities” and “Challenge Activities”. There is always such an assignment due on the days the class meet (except the test days). These assignments are named by their due dates to help you keep tracking of them. This is to ensure that students will read the book and practice, which is needed for understanding the concepts and master the skills covered in this course.

Another part of your homework assignments are assigned through WebWork. Details about WebWork assignments will be discussed in class.

Tests and Makeup Work: There will be three tests and one final exam. The dates of the tests are given on the first page. All the tests (including the final exam) will be given in the form of Canvas quizzes and will be open book, open notes.

Extensions and Makeup Work: No extensions or makeup work will be given without a valid reason. You must contact me ahead of time to arrange to makeup your missed exams. See <https://sass.uncc.edu/services/absence-verification>.

Special Accommodations: If you plan to seek special accommodations (ie: through the Office of Disability Services or for religious observances), be sure to contact the appropriate campus department and follow their instructions for obtaining accommodations, including

dealing with all related paperwork, as early as possible. All paperwork and requests for accommodations for a test need to be received **at least 3 days before** the date of the test. You are encouraged to meet with me to discuss the accommodations outlined in your paperwork.

The Office of Disability Services is located in Fretwell 230, and they can be reached at <https://ds.uncc.edu/> or 704-687-0040. The procedure for requesting a religious accommodation, as well as the associated form, can be found at <https://legal.uncc.edu/policies/up-409>.

How to Succeed in this Course: The list below contains some of the obvious things to look out for as well as some things that are specific to how I have structured our course:

- show up to class
- be prepared for class: review the work from the previous day(s) and do some reading on the new materials coming up if at all possible so you can bring questions to class.
- keep up with the homework
 - start working on the homework questions the day that topic is covered in class
 - when working on the homework questions, look over your class notes and the textbook
 - complete and turn in the homework on time
- study for the tests in a productive way
 - make a list of all of the definitions, facts, theorems, and algorithms for each chapter
 - when studying for the test, follow the study guide and what we talked about in class
 - don't overthink it; I'm not trying to trick you
- be sure to check out the resources on our canvas pages
- interact with the instructor to get help: The instructor will be available to meet through Zoom for office hours, chat via Canvas, will respond to emails, and participate in discussion boards in Canvas.
- interact with other students to get help: The Canvas interface makes connecting with other students easy. Though it is required that every student do his or her own work, you are encouraged to form study groups and/or ask questions of your peers. Students are encouraged to answer discussion posts too. This can provide additional help and support.

Academic Integrity Policy Summary: I expect that your work is entirely your own and that you have not used any unauthorized materials or engaged in any form of academic

dishonesty. Academic dishonesty is defined to be any method of providing or receiving unauthorized or excessive assistance.

Homework, Quizzes and Tests: Unauthorized material on homework and quizzes would be obtaining a solutions key to the questions and simply copying the answers or getting someone else to work the questions for you – either a fellow student or an online site. For tests, in addition to the above, unauthorized materials would also include using things like books, notes, calculator, etc. when they are not explicitly allowed.

Definition of Cheating: Intentionally using or attempting to use unauthorized materials, information, notes, study aids or other devices in any academic exercise. This definition includes unauthorized communication of information during an academic exercise.

Common Examples of Cheating: Copying from another student's paper or receiving unauthorized assistance during a quiz, test or examination; using books, notes (e.g., cheat sheets or note cards) or other devices (e.g., calculators or cell phones) when these are not authorized; procuring without authorization tests or examinations before the scheduled exercise. This also includes sharing calculators during a test.

Unauthorized/Excessive Assistance: The student may not give or get any unauthorized or excessive assistance in the preparation of any work.

Complicity in Academic Dishonesty: Intentionally or knowingly helping or attempting to help another to commit an act of academic dishonesty.

Common Examples of Complicity: Knowingly allowing another to copy from one's paper during an examination or test; sharing calculators during an exam; knowingly distributing test questions or substantive information about the material to be tested before the scheduled exercise; or signing a false name on an academic exercise.

Consequences: If I find a student has cheated or has intentionally aided a classmate in cheating, that student will receive a zero on the test or quiz. If I find a student has cheated for a second time, that student will receive a zero for the course. It is your responsibility to know the academic code of integrity and our class policy on cheating. If you have questions about a situation or how the policies apply to this class, feel free to ask me.

These definitions and examples were taken and slightly adopted from University Policy 407: the Code of Student Academic Integrity, section III (<http://legal.uncc.edu/policies/up-407#III>).

Non-Discrimination: All students and the instructor are expected to engage with each

other respectfully. Unwelcome conduct directed toward another person based upon that person's actual or perceived race, actual or perceived gender, color, religion, age, national origin, ethnicity, disability, or veteran status, or for any other reason, may constitute a violation of University Policy 406, The Code of Student Responsibility. Any student suspected of engaging in such conduct will be referred to the Office of Student Conduct.

Title IX: Title IX UNC Charlotte is committed to providing an environment free of all forms of discrimination and sexual harassment, including sexual assault, domestic violence, dating violence, and stalking. If you (or someone you know) have experienced or are experiencing any of these incidents, know that you are not alone. UNC Charlotte has staff members trained to support you in navigating campus life, accessing health and counseling services, providing academic and housing accommodations, helping with legal protective orders, and more. Please be aware that many UNC Charlotte employees, including all faculty members, are considered Responsible Employees who are required to relay any information or reports of sexual misconduct they receive to the Title IX Coordinator. This means that if you tell me about a situation involving sexual harassment, sexual assault, dating violence, domestic violence, or stalking, I must report the information to the Title IX Coordinator. Although I have to report the situation, you will still have options about how your case will be handled, including whether or not you wish to pursue a formal complaint. Our goal is to make sure you are aware of the range of options available to you and have access to the resources you need. If you wish to speak to someone confidentially, you can contact any of the following on-campus resources, who are not required to report the incident to the Title IX Coordinator: (1) University Counseling Center (counselingcenter.uncc.edu, 7-0311); (2) Student Health Center (studenthealth.uncc.edu, 7-7400); or (3) Center for Wellness Promotion (wellness.uncc.edu, 7-7407). Additional information about your options is also available at titleix.uncc.edu under the "Students" tab.

Religious Accommodation: Students who, acting in accordance with this Policy, miss classes, examinations or other assignments because of a religious practice or belief must be provided with a reasonable alternative opportunity to complete such academic responsibilities. It is the obligation of students to provide faculty with reasonable notice of the dates of religious observances on which they will be absent by submitting a Request for Religious Accommodation Form to their instructor prior to the census date for enrollment for a given semester. The census date for each semester (typically the tenth day of instruction) can be found in UNC Charlotte's academic calendar.

Student Grievances: Student Grievances Students enrolled in courses at the University of North Carolina at Charlotte who would like to file a complaint regarding their experience may do the following: 1. Refer to the UNC Charlotte Student Grievance Procedure. Students may also contact UNC Charlotte's regional accrediting agency, the Southern Association of Colleges and Schools Commission on Colleges. 2. Students residing outside of North Carolina while attending UNC Charlotte may file a complaint in their state of residence. As required by federal regulations, students are directed to the list of resources here, compiled and updated by the State Higher Education Executive Officers.

Withdrawals: Students are expected to complete all courses for which they are registered at the close of the add/drop period. If you are concerned about your ability to succeed in this course, it is important to make an appointment to speak with me as soon as possible. The University policy on withdrawal allows students only a limited number of opportunities available to withdraw from courses. It is important for you to understand the financial and academic consequences that may result from course withdrawal.

Disability Support Services: Students in this course seeking accommodations for disabilities must first consult with the Office of Disability Services and follow the instructions of that office for obtaining accommodations. The Office of Disability Services works with current undergraduate and graduate students along with prospective students to ensure equal access to UNC Charlotte's campus and educational programs. All services are dependent upon verification of eligibility. Once approved for services, students receive accommodations which are based upon the nature of an individual's disability and documented needs. Students are strongly encouraged to register or check-in for their accommodations with a Disability Services counselor as soon as they have registered for classes. Accommodations are not retroactive and will not begin until the student notifies his or her faculty by providing the Letter of Accommodation. Please visit the Office of Disability Services at for additional resources, email questions to disability@uncc.edu, or call 704-687-0040 for more information.

Student Support Services: Be sure to take advantage of the wealth of resources and support available at UNC Charlotte. Some of the resources available to you include the University Writing Resource Center, University Counseling Center, and the J. Murrey Atkins Library.

- University Writing Resources Center (WRC) | 704-687-1899 | wrchelp@uncc.edu
- Veteran Student Services | 704-687-5488 | veteranservice@uncc.edu
- University Counseling Center | 704-687-0311
- Multicultural Resource Center | 704-687-7121 | mrc@uncc.edu
- Atkins Library Laptop Lending program