

**SYLLABUS: HONORS MATHEMATICS IV
MATH 3402 SPRING 2021**

1. COURSE DETAILS

Instructor: Associate Professor Dr. David J. Gryniewicz

Office: Dunn Hall 367

Office Hours: MWF by appointment

Webpage: www.diambri.org/honiv

University of Memphis Email: djgrynk@...

Time and Location: DH 203 MW 11:30 – 12:25, F 11:30 – 13:25

Final Exam: Monday May 3, 10:30 – 12:30

Textbook: Linear Algebra and Differential Equations by Peterson and Sochacki, Addison Wesley

2. COURSE DESCRIPTION

This is an advanced combo course in Linear Algebra and Ordinary Differential Equations. It is part of the honours sequence and replaces MATH 3242 after successful completion of the full sequence. We aim to cover topics from Ch. 1–6 in the textbook, covering matrices, determinants, vector spaces, linear independence, bases, linear differential equations, linear transformations, eigenvalues and eigenvectors, and systems of differential equations.

3. COVID-19 CONSIDERATIONS

This course will be taught in hybrid mode. I will live stream lectures via zoom from the university. Recordings of the lectures will be uploaded to the Microsoft cloud with access links sent to students afterwards. Links to the zoom meeting will be sent beforehand, and students will need to login using their university account to verify identity. Remote Attendance for those attending remotely will be drawn from user statistics on the zoom platform. While conditions allow, some (or all) students will also be allowed to attend the lectures at university in person.

If class size remains small enough, any student who wishes may opt to attend lectures/tests in person. To do so, simply email me that you wish to be put on the in-person roster. If the demand for in-person instruction exceeds safe and allowed restrictions due to CoVid-19, students wishing to attend in-person will be put on an alternating rotating schedule. However, based on the current size of enrollment and CoVid restrictions in place, this is not necessary at this time (but is subject to change). If CoVid restrictions increase, or I am forced to quarantine, the class may be taught fully remotely via zoom for a temporary portion of the semester.

While on campus, all students and myself will be required to wear a **mask/facial covering** that covers the nose and mouth whenever in the presence of others, and follow basic social distancing guidelines. Violators may be banned from campus or face more serious penalties.

Please see the university website for the latest updates regarding CoVid-19 related policies and requirements which are subject to change during the course of the semester. The disability office can assist with students who are at high risk if exposed to CoVid-19. If you test positive or experience symptoms that lead you to believe you have CoVid-19, please do not attend in-person lectures. Report all instances of positive tests for CoVid-19 to the university. A testing site for the university is available at the corner of Central and Patterson.

4. COURSE ASSESSMENT

Grading for the course will be based upon Homework Assignments, a Midterm Exam and a Final Exam according to the following formula:

HW: Homework Average (lowest score dropped)	20%
MT: Midterm	30%
F: Final	50%

- Homework will be announced via email or found on the course website, given roughly on a weekly to bi-weekly basis.
- Students may collaborate on the HW by talking with each other about how to solve questions in general, in person or via electronic means. However, no written solutions or answers should be shared, and copying solutions and answers, whether from another student or other source, will be treated as cheating and comes with potentially serious consequences. If CoVid conditions allow for Team Project assignments, these rules will be applied to each team rather than student on relevant assignments.
- The use of computers or advanced calculators (with symbolic algebra capabilities) is not permitted except on specially designed assignments that indicate this. Ordinary scientific calculators without these capabilities are allowed in general.
- Both tests will be done in-class (CoVid Allowing) and/or via Zoom. Students testing remotely via zoom will take the test at the same time as all other students and will need a stable internet connection as well as a computer/laptop with **WebCam** required. The camera should be positioned so that the student's work area (desk or table top) is visible, as well as the upper portion of the student themselves, during the entirety of the exam. Students coordinating with the disability office should alert me to their circumstances so that arrangements can be made.
- When turning in a HW assignment or test via email, please include in the subject your Full Name and the assignment name (e.g, HW1, HW2, MT, Final, etc.). Also be sure to include this information written on the assignment/test itself.
- Homework and any remotely taken tests all need to be submitted as a *Single pdf file* emailed to my university email address. There are freely available apps for converting photos to pdf, as well as other freely available conversion software online. Students may also turn in Homework or tests in person, when this option is available.