MATH 3200 Syllabus, Fall Semester 2021

COURSE TITLE: Applied Linear Algebra

CLASS NUMBER: 5785

WHEN AND WHERE: MWF 8:35a.m.-9:30a.m. 237 Morton Hall.

For each class, go to https://app.tophat.com/login and log in with your OU credentials. Join code 137421.

INSTRUCTOR: Winfried Just, 315C Morton Hall, email <u>just@ohio.edu</u> tel. 740-593-1260

OFFICE HOURS: 9:40a.m.-10:40a.m. 315C Morton Hall. If you need to see me at other times, please call 740-593-1260 for an appointment or request one by e-mail to just@ohio.edu

COURSE CONTENT: A course on linear algebra with an emphasis on applications and computations. Solutions to linear systems, matrices and matrix algebra, determinants, *n*-dimensional real vector spaces and subspaces, bases and dimension, eigenvalues and eigenvectors, diagonalization, norms, inner product spaces, orthogonality and least squares problems.

TEXTBOOK: W. Just, *Applied Linear Algebra*. Top Hat 2021. Course materials will also be made successively available through Top Hat, at https://people.ohio.edu/just/M3200F21/ and sample solutions will also be made available through Blackboard.

TECHNICAL SUPPORT: For all technical issues that you may experience with accessing and using the course materials and the interactive features provided by Top Hat, please contact their technical support at support@tophatmonocle.com or through https://success.tophat.com/s/contactsupport

PREREQUISITES: MATH 163A or 263A or 1350 or 2301. You should at least have earned a C in that course to be adequately prepared for MATH 3200. WARNING: No credit for both this course and MATH 3210 (always deduct credit for first course taken).

GRADING: Based on in-class and homework questions graded through Top Hat, out-of-class group work, in-class quizzes, and an in-class final exam. The following weights will be applied to the percentages from these components:

- Total of questions graded by Top Hat: Weight 0.25
- Group work: Weight 0.1
- Mean of the best 4 scores of the 6 quizzes: Weight 0.4
- Score on the final: Weight 0.25

The final will be comprehensive. The quizzes will be given on 6 Wednesdays during the second halves of the class period; precise quiz dates will be announced 2 days in advance in class and

through BlackBoard. The final will start on Wednesday, Wednesday, December 8, at 8:00 a.m. *There will be no make-up quizzes*, but only the scores of the best four quizzes will be added and included in the calculation of your total score. Moreover, students who submit properly documented excuses for missing more than one quiz will have the option of having a scaled version of their score on the final count for one of their quizzes. In any case, excuses for missing a quiz or the final must be submitted **before** the quiz or final is given. The weighted average of the percentages will be converted into letter grades as follows:

- **A** 86-100 **A-** 81-85
- **B**+ 78-80 **B** 74-77 **B** 71-73
- C+ 68-70 C 64-67 C- 61-63
- **D**+ 58-60 **D** 53-57 **D** 51-53

There will be no curving. Quizzes, and the final may contain multi-step problems with no partial credit given for subsequent steps if the first step is wrong.

CHEATING: *Don't.* The penalty may be an F for the course.

ATTENDANCE: Will be taken indirectly through your answers to questions during the in-class presentations. Typically, part of the score for these questions is based on participation, so make sure you attempt to answer each of them in the allotted time frame. *If you have a valid excuse for not being able to attend a presentation, you need to inform me by e-mail prior to the start of the class period.*

HOMEWORK: Will be assigned and graded through Top Hat. It is your responsibility to regularly check for assigned homework problems and their due dates.

PROTECTING ALL OF US FROM COVID-19: All Ohio University Policies regarding wearing masks and social distancing will be strictly followed. For current regulations, see https://www.ohio.edu/coronavirus/presidential-health-directive Please be aware that the level of threat that the virus poses on campus and in our local community may change and that these policies are subject to modifications as the semester progresses. Please be aware that you may be required to quarantine yourself when a classmate tests positive for COVID-19. In order to minimize your chances of needing to go into quarantine, it is essential that for every class period you electronically submit the information about your seat in class.

OTHER OHIO UNIVERSITY POLICIES: All university policies with regard to withdrawals, early final exams, academic honesty, etc. will be strictly followed. Information on Ohio University's policies on academic misconduct can be found at the URL: http://www.ohio.edu/communitystandards/academic/students.cfm Any student who suspects s/he may need an accommodation based on the impact of a disability should contact the class instructor privately to discuss the student's specific needs and provide written documentation from the Office of Student Accessibility Services. If the student is not yet registered as a student with a disability, s/he should contact the Office of Student Accessibility Services.