MA 565

Linear Algebra I Fall 2015, MWF 12-12:50 Whitehall Classroom Building 343-CB

Instructor: Dave Jensen Office: POT 733 Office Hours: MWF 11-12 or by appointment Email: dave.h.jensen@gmail.com

Course Description: The ideas and methods of linear algebra are used throughout all fields of mathematics and most other sciences. The central objects of study in linear algebra are vector spaces and linear maps. This course will introduce these objects from a more abstract perspective than one usually sees in an undergraduate course on the subject.

Required Materials: Linear Algebra Done Right by Sheldon Axler, Springer-Verlag, 2nd edition, ISBN-13: 978-0387982588. A PDF version is available at fetweb.ju.edu/staff/EE/jrahal/PDF/sc - Linear Algebra Done Right.pdf .

Notes: Each week, a different student will be responsible for texing up notes for the classes that week. The tex file should be sent to the instructor by Friday the following week. Afterwards, you will be asked to do a round of revisions, and will be graded on the revised version.

Homework: There will be homework assigned every Friday, due the following Friday. It is fine to discuss the homework together, but you must write up your own solutions in your own words. Your solutions should be written in full sentences and be grammatically correct.

Exams: There will be two midterms and one final exam. The midterms will be in class on September 30 and November 18.

Grading: Your course score will be based on the following percentages:

10% Notes
30% Homework
20% Midterm 1
20% Midterm 2
20% Final

Your letter grade will be determined according to the common 100% scale, rounded to the nearest percent:

 $\begin{array}{l} 90-100\%~{\rm A}\\ 80-89\%~{\rm B}\\ 70-79\%~{\rm C}\\ 60-69\%~{\rm D}\\ 0-59\%~{\rm E} \end{array}$

Academic Integrity: Per university policy, students shall not plagiarize, cheat, or falsify or misuse academic records. Students are expected to adhere to University policy on cheating and plagiarism in

all courses. The minimum penalty for a first offense is a zero on the assignment on which the offense occurred. If the offense is considered severe or the student has other academic offenses on their record, more serious penalties, up to suspension from the university may be imposed.

Plagiarism and cheating are serious breaches of academic conduct. Each student is advised to become familiar with the various forms of academic dishonesty as explained in the Code of Student Rights and Responsibilities. Complete information can be found at the following website: http://www.uky.edu/Ombud . A plea of ignorance is not acceptable as a defense against the charge of academic dishonesty. It is important that you review this information as all ideas borrowed from others need to be properly credited.

Part II of Student Rights and Responsibilities (available online

http://www.uky.edu/StudentAffairs/Code/part2.html) states that all academic work, written or otherwise, submitted by students to their instructors or other academic supervisors, is expected to be the result of their own thought, research, or self-expression. In cases where students feel unsure about the question of plagiarism involving their own work, they are obliged to consult their instructors on the matter before submission.

When students submit work purporting to be their own, but which in any way borrows ideas, organization, wording or anything else from another source without appropriate acknowledgment of the fact, the students are guilty of plagiarism. Plagiarism includes reproducing someone elses work, whether it be a published article, chapter of a book, a paper from a friend or some file, or something similar to this. Plagiarism also includes the practice of employing or allowing another person to alter or revise the work which a student submits as his/her own, whoever that other person may be.

Students may discuss assignments among themselves or with an instructor or tutor, but when the actual work is done, it must be done by the student, and the student alone. When a students assignment involves research in outside sources of information, the student must carefully acknowledge exactly what, where and how he/she employed them. If the words of someone else are used, the student must put quotation marks around the passage in question and add an appropriate indication of its origin. Making simple changes while leaving the organization, content and phraseology intact is plagiaristic. However, nothing in these Rules shall apply to those ideas which are so generally and freely circulated as to be a part of the public domain (Section 6.3.1).

Please note: Any assignment you turn in may be submitted to an electronic database to check for plagiarism.

Accommodations Due to Disability: If you have a documented disability that requires academic accommodations, please see me as soon as possible during scheduled office hours. In order to receive accommodations in this course, you must provide me with a Letter of Accommodation from the Disability Resource Center (Room 2, Alumni Gym, 257-2754, email address: jkarnes@email.uky.edu) for coordination of campus disability services available to students with disabilities.

Suggestions and Other Course Issues: Suggestions for improvement are welcome at any time. Any concern about the course should be brought first to my attention. Further recourse is available through the Mathematics Director of Undergraduate Studies and the Department Chair, both accessible from the Main Office in 715 Patterson Office Tower.