Syllabus for MA 565 - Linear Algebra I (Fall 2018)

Time and Place: 12:00 - 12:50 pm MWF, CB 345.

Instructor: Uwe Nagel, POT 723, 257-3470, uwe.nagel@uky.edu and www.ms.uky.edu/∼uwenagel.

Office Hours: 11:00 - 11:50 am MWF, or by appointment. You can also consult me by e-mail.

Exams: Midterm exam (CB 345, Oct 12, 12:00 - 12:50 pm)
Final exam (CB 345, Dec 12, 10:30 - 12:30 am)

Textbook: Script "Linear Algebra" by Heide Gluesing-Luerssen (see announcement on canvas for how to purchase it).
   (One of the benefits of attending a research university is learning from scholars who are acknowledged in their fields and who write for national and international educational and scholarly communities. This textbook is written by a UK faculty member. Dr. Gluesing-Luerssen does not receive neither any money nor any royalty because we are using this material in the course.)

Material: The central objects of linear algebra are vector spaces and linear maps. The course will introduce the tools and concepts needed. In particular, several types of vector spaces and normal forms of linear maps will be discussed.
   Ideas, methods, and the language developed in linear algebra are widely used in all areas of mathematics and most other sciences.

LITERATURE
(1) H. Gluesing-Luerssen, Linear Algebra, available at RICOH
(2) K. Hoffman and R. Kunze: Linear Algebra (2nd Edition), Prentice Hall 1971
(3) S. Roman: Advanced Linear Algebra (3rd Edition), Springer 2007
(4) S. Lang: Linear Algebra (UTM, 3rd Edition), Springer 2004

Homework: Homework problems will be assigned about every week. The assignments will be posted on canvas at https://www.uky.edu/canvas/.

Quizzes: A 10-minute quiz will be given usually at the end of Friday's lecture, beginning, Aug 31.

Grades: There are 450 total points in the course with 100 points earned for the midterm, 150 points for the final exam, 100 points for solutions of the homework problems, and 100 points for quizzes.
   Thus, an A requires at least 405 points, a B at least 360 points, a C at least 315 points, a D for undergraduate students at least 270 points. Lower scores will result in an E. A D is not allowed for graduate students.