Spring 2014 · Online Course

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Virtual Office Hours: MONDAY: 1-2:30pm & 5-6pm; TUESDAY: 12-1:30pm; WEDNESDAY: 8:30-10:30am (I will hold Wednesday hours in my office as well as virtual); THURSDAY: 9-10am

Other Virtual Hours can be made by appointment. To make an appointment, please email me with a few specific dates and times that you are available to meet and I will try to work my schedule to meet with you. To meet during these hours please go to the Virtual Meeting Room.

Text : "Linear Algebra and its applications" by David Lay (ISBN: 978-0-321-38517-8) 4th edition will be referred to in this course.

Required: At least a scientific calculator. Graphing calculators are permitted and encouraged.

Course Description: This course will be a comprehensive introduction to linear algebra and matrix theory. We will tentatively cover Chapters 1-6. See page two for detailed learning outcomes given by the math department.

Course Policies:

1. Course grades are determined by:

15% - Videos Lessons YOU ARE GRADED BY THE ACCOMPANYING QUIZZES - these are NOT optional

15% - May include Turn-In Assignments, Surveys, Short Quizzes, Special Assignments, or Q&A Forums

70% - Tests (3 non-proctored tests 10% each, midterm 15% proctored, comprehensive Final Exam 25% proctored)

Grading Scale: 90%-100% A; 80%-89% B; 70%-79% C; 60%-69% D; 0%-59% F (plus and minus grades will be assigned only in close cases)

2. Assignments are typically due on Mondays. Please stay alert to due dates. While videos will stay open for review, you will need to complete each week's work on time or you will quickly find yourself too far behind to catch up. If there are extenuating circumstances email the professor immediately attaching the appropriately scanned documentation.

3. Homework may be collected at any time. That is, you may be asked to scan your homework and turn it in.

4. You will be given approximately a week to take a proctored exam. Make-up exams will only be given in extenuating circumstances and must have professional documentation for approval.

5. While there is no monitoring of how you conduct your weekly work it is assumed that you will give your full attention to your work when you view the videos, work on assignments or visit virtual office hours. Keep in mind you must answer the questions in the Video Lessons in Moodle.

6. Appropriate language is expected both written and verbal during virtual hours. (This includes abbreviations.)

7. Please keep in mind that while I will do the best to be present at every office hour (both live and virtual) but there are times when events (including technical issues) stop this from occurring. I will do my best to email the class and let them know when there are such occasions. Stark Tutoring hours and office hours will not be held if the Stark Campus has classes canceled during the scheduled session.

8. The proctored final exam is required. Failure to show for the final exam may result in an F for the course.

Academic Honesty: Use of the intellectual property of others without attributing it to them is considered a serious academic offense. Cheating or plagiarism will result in a failing grade for the work or for the entire course. Repeat offenses result in dismissal from the University. University guidelines require that all infractions be reported to the Student Conduct Officer on our campus.

Students with Disabilities: University policy 3-01.3 requires that students with disabilities be provided reasonable accommodations to ensure their equal access to course content. If you have a documented disability and require accommodations, please contact the instructor at the beginning of the semester to make arrangements for necessary classroom adjustments. Please note, you must first verify your eligibility for these through Student Accessibility Services (contact 330-244-5047 or visit http://stark.kent.edu/student/resources/accessibility.cfm for more information on registration procedures).

Withdrawal: If you are considering withdrawing from this course, please consult with a staff member in the Office of Student Services of your local campus. Withdrawal from a course can affect financial aid, student status, or progress within your major. For withdrawal deadlines, please refer to http://www.registrars.kent.edu/home/TermUpdate/sche_adj.htm.

Departmental Learning Outcomes for Linear Algebra with Applications, MATH-21001

21001 Linear Algebra with Applications (3)

Knowledge

The students should be able to define characteristic polynomial of a square matrix, and a nilpotent matrix.

Comprehension

Should be able to find the characteristic polynomial by computing a determinant, and compute the power of a square matrix.

Application

A typical application is to determine whether a square matrix of small size is nilpotent.

Analysis

Should be able to determine whether a 2x2, 3x3, 4x4, and a 5x5 matrix is nilpotent. Should know that, based on the characteristic polynomial of the matrix, what is the highest power of the matrix to computer to conclude.

Synthesis

Should get use to combine their skills from Linear Algebra to solve a more advanced problem.

Evaluation

Should be able to find the characteristic polynomial for any specific square matrix of small size, and for some more general matrices of special type.

Class Activities

To solve problems in class.

Out of class Activities

To submit every week home assignments. Honor students are also required to read material on minimal polynomial of matrices as well, and prove some general results.