Syllabus for MATH 3330-004, Spring 2017 Class: MoWe 4:00PM – 5:20PM PKH 321

1. Instructor: G. Liao, Email: liao@uta.edu

2. Office: PKH 447, Phone: 817 272 2647

3. Office Hours: Mo 5:30pm – 6:20pm, Tu Th 4:30pm – 5:20pm

4. Course Prerequisites: C or above in College Algebra

5. Textbook: Linear Algebra with Applications (Otto Bretscher), Fifth Edition

6. Course Description: Introductory course on linear spaces, linear transformations, inner product spaces, matrices, determinants, eigenvalues and eigenvectors

7. Course Learning Goals/Objectives: Learn basic concepts and techniques of linear algebra through matrices.

8. Expectations: You are expected to thoroughly read the appropriate sections in the textbook, understand all definitions, theorems, and relevant examples that are covered in the lectures. You are expected to work out all assigned homework problems. Active participation in group discussions in and out of the classroom is encouraged.

Attendance: Attendance is required and is taken in class from time to time.

9. Grading: Course grade is based on three tests and a final exam. One of the tests with the lowest score will be dropped. Each of the remaining two tests counts 30%; and the final exam counts 40%.

Test 1: We Feb 15; Test 2: We April 5; Test 3: We April 26 Final Exam: Wednesday May 10, 2pm-4:30pm

Homework will be assigned but not graded.

Makeup Tests: No makeup tests. One of missed tests will be deleted.

10. Tentative Course Schedule:

01/18(We): (1.1) 01/23: (1.1) & (1.2) 01/25: (1.2) 01/30: (1.3) 02/01: Ch. 1 Review and (2.1) 02/06: (2.2) 02/08: (2.3) 02/13: Review

02/15(We): Test 1 (1.1, 1.2, 1.3, 2.1, 2.2, 2.3)

02/20: (2.4) 02/22: 2.4 & 3.1 02/27 (We): (3.1) 03/01(We): (3.1) & (3.2) 03/06: (3.2) 03/08: Review 03/20 (Mo): (3.3) 03/22 (3.4) 03/27: Ch. 3 Review 03/29 (We): (4.1) 04/03 (Mo): Review & (5.1)

04/05 (We): Test 2 (2.4, 3.1 – 3.4, 4.1)

04/10 (5.2) 04/12 (We): (6.1) 04/17: (6.2) 04/19: (7.2) 04/24: Review & (7.3)

04/26: Test 3 (5.1, 5.2, 6.1, 6.2, 7.2)

05/01 (Mo): Review 05/03 (We): Review

**Final Exam: Wednesday May 10, 2pm-4:30pm

Homework Assignments (Linear Algebra with Applications, by Bretscher, 5th ed.)

(1.1): 3, 7, 10, 11, 15, 17, 31, 33; (1.2): 3, 5, 8, 9, 11, 35, 36

(1.3): 1, 2, 3, 5, 9, 11, 12, 14, 15, 17, 18, 27, 28, 34, 36

(2.1): 1, 3, 5, 6, 8, 11, 13, 14, 17, 19, 23, 25, 27, 30; (2.2): 2, 5, 6, 7, 13, 27

(2.3): 1, 3, 7, 11, 13, 14; (2.4): 1, 3, 5, 7, 12, 13, 17, 19, 29, 32

(3.1): 1, 5, 7, 9, 11, 14, 15, 23, 24, 31, 32, 33; (3.2): 1, 2, 3, 5, 8, 11, 15, 17, 19, 27, 31, 33

(3.3): 1 - 15 (odd numbers), 21, 23, 27, 29, 30, 31, 32; (3.4): 1 - 29 (odd numbers), 44, 45

(4.1): 1, 3, 5, 6, 8, 16, 20, 24, 26, 32, 35, 45

(5.1): 1, 3, 6, 8, 10, 17, 26, 27; (5.2): 2, 6, 13, 14, 32, 33, 35

(6.1): 2, 5, 9, 11, 15, 18, 22, 25, 30, 35, 40; (6.2): 1, 3, 6, 25, 28, 45

(7.2): 3, 9, 11; (7.3): 5, 9, 11

Final Review Week: for semester-long courses, a period of five class days prior to the first day of final examinations in the long sessions shall be designated as Final Review Week. The purpose of this week is to allow students sufficient time to prepare for final examinations. During this week, there shall be no scheduled activities such as required field trips or performances; and no instructor shall assign any themes, research problems or exercises of similar scope that have a completion date during or following this week *unless specified in the class syllabus*. During Final Review Week, an instructor shall not give any examinations constituting 10% or more of the final grade, except makeup tests and laboratory examinations. In addition, no instructor shall give any portion of the final examination during Final Review Week. During this week, classes are held as scheduled. In addition, instructors are not required to limit content to topics that have been previously covered; they may introduce new concepts as appropriate.

As the instructor, I reserve the right to adjust this schedule in any way that serves the educational needs of the students enrolled in this course.

11. Calculator Policy: On the tests and the final exam, nonprogrammable calculators with basic computational features are allowed. Calculators with the following features are NOT allowed: graphing, equation solving, differentiation and integration. Any device that has internet or e-mail capabilities (including cell phones) and devices with a keyboard are also not allowed.

These two calculators are recommended: TI-30XA and TI-30XIIS.

12. Student Support Services: UT Arlington provides a variety of resources such as tutoring, major-based learning centers (i.e. Math Clinic in Room 325 PKH), developmental education, advising and mentoring, personal counseling, and federally funded programs. For individualized referrals, students may visit the reception desk at University College (Ransom Hall), call the Maverick Resource Hotline at 817-272-6107, send a message to resources@uta.edu, or view the information at http://www.uta.edu/university.college/caseurces/index.php

http://www.uta.edu/universitycollege/resources/index.php.

Electronic Communication: UT Arlington has adopted MavMail as its official means to communicate with students about important deadlines and events, as well as to transact university-related business regarding financial aid, tuition, grades, graduation, etc. All students are assigned a MavMail account and are responsible for checking the inbox regularly. There is no additional charge to students for using this account, which remains active even after graduation. Information about activating and using MavMail is available at http://www.uta.edu/oit/cs/email/mavmail.php.

Campus Carry: Effective August 1, 2016, the Campus Carry law (Senate Bill 11) allows those licensed individuals to carry a concealed handgun in buildings on public university campuses, except in locations the University establishes as prohibited. Under the new law, openly carrying handguns is not allowed on college campuses. For more information, visit http://www.uta.edu/news/info/campus-carry/

Student Feedback Survey: At the end of each term, students enrolled in face-to-face and online classes categorized as "lecture," "seminar," or "laboratory" are directed to complete an online Student Feedback Survey (SFS). Instructions on how to access the SFS for this course will be sent directly to each student through MavMail approximately 10 days before the end of the term. Each student's feedback via the SFS database is aggregated with that of other students enrolled in the course. Students' anonymity will be protected to the extent

that the law allows. UT Arlington's effort to solicit, gather, tabulate, and publish student feedback is required by state law and aggregate results are posted online. Data from SFS is also used for faculty and program evaluations. For more information, visit http://www.uta.edu/sfs.

Disability Accommodations: UT Arlington is on record as being committed to both the spirit and letter of all federal equal opportunity legislation, including *The Americans with Disabilities Act (ADA), The Americans with Disabilities Amendments Act (ADAAA),* and *Section 504 of the Rehabilitation Act.* All instructors at UT Arlington are required by law to provide "reasonable accommodations" to students with disabilities, so as not to discriminate on the basis of disability. Students are responsible for providing the instructor with official notification in the form of a letter certified by the Office for Students with Disabilities (OSD). Only those students who have officially documented a need for an accommodation will have their request honored. Students experiencing a range of conditions (Physical, Learning, Chronic Health, Mental Health, and Sensory) that may cause diminished academic performance or other barriers to learning may seek services and/or accommodations by contacting: **The Office for Students with Disabilities, (OSD)** www.uta.edu/disability or calling 817-272-3364. Information regarding diagnostic criteria and policies for obtaining disability-based academic accommodations can be found at www.uta.edu/disability.

Counseling and Psychological Services, (CAPS) www.uta.edu/caps/ or calling 817-272-3671 is also available to all students to help increase their understanding of personal issues, address mental and behavioral health problems and make positive changes in their lives.

Non-Discrimination Policy: The University of Texas at Arlington does not discriminate on the basis of race, color, national origin, religion, age, gender, sexual orientation, disabilities, genetic information, and/or veteran status in its educational programs or activities it operates. For more information, visit <u>uta.edu/eos</u>.

Title IX Policy: The University of Texas at Arlington ("University") is committed to maintaining a learning and working environment that is free from discrimination based on sex in accordance with Title IX of the Higher Education Amendments of 1972 (Title IX), which prohibits discrimination on the basis of sex in educational programs or activities; Title VII of the Civil Rights Act of 1964 (Title VII), which prohibits sex discrimination in employment; and the Campus Sexual Violence Elimination Act (SaVE Act). Sexual misconduct is a form of sex discrimination and will not be tolerated. *For information regarding Title IX, visit* www.uta.edu/titleIX or contact Ms. Jean Hood, Vice President and Title IX Coordinator at (817) 272-7091 or jmhood@uta.edu.

Academic Integrity

Per UT System *Regents' Rule* 50101, §2.2, suspected violations of university's standards for academic integrity (including the Honor Code) will be referred to the Office of Student Conduct. Violators will be disciplined in accordance with University policy, which may result in the student's suspension or expulsion from the University. Additional information is available at https://www.uta.edu/conduct/.

Emergency Phone Numbers: In case of an on-campus emergency, call the UT Arlington Police Department at **817-272-3003** (non-campus phone), **2-3003** (campus phone). You may also dial 911. Non-emergency number 817-272-3381