

**SYLLABUS  
FOR  
MATH 2311  
LINEAR ALGEBRA**

**COURSE:** MTH 2311 Section 3 T,TH 11:00-12:20 pm SR 325

**INSTRUCTOR:** Dr. Lance L. Littlejohn, Office SR 316B

**OFFICE HOURS:** M: 2:30-3:30pm  
W: 2:00-3:00pm  
TH: 9:00-10:00am

**DEPARTMENTAL PHONE:** 710-3561

**OFFICE PHONE:** 710-3165

**EMAIL ADDRESS:** Lance\_Littlejohn@baylor.edu

**TEXT:** *Linear Algebra and Its Applications*, Third Edition, David C. Lay, Addison-Wesley, 2003

**PREREQUISITES:** A grade of C or better in MTH 1322.

**ATTENDANCE:** Attendance for each class is expected. You should be aware of the attendance policy as stated in the Baylor catalog. Should you miss a class for whatever reason, you are still responsible for the material discussed and any assignments made. Also, please get to class on time.

**GRADES:** Your grade will be determined as follows:

**Grading Policy:** Your final grade is based on three components: Quizzes (10%), 3 Midterm Exams (each worth 20%) and a Comprehensive Final Exam (worth 30%). Further details are listed below on each of these components.

**Homework:** No homework will be collected – but each student is urged to keep up with the homework that is assigned after each class. Weekly quizzes – see below - will instead be given to make sure that students are keeping up to date on a daily basis.

**Quizzes:** Weekly quizzes will be given to make sure that students are keeping up to date on a daily basis. I am hoping that there will be at least 11 quizzes given during the course of the semester and **your best 10 quizzes will count for a total of 10% of your final grade.** Usually, these quizzes will be given on Thursday but sometimes, due to a tight schedule, a quiz may be postponed until the following Tuesday. **NO MAKEUP QUIZZES WILL BE GIVEN.**

**Midterm Tests:** There will be three midterm tests (see schedule below for approximate test dates). **Each of these three midterms will be worth 20% of your final grade.** I am *tentatively* scheduling the following dates for each of our midterm examinations:

Midterm 1: February 12 (Tuesday)

Midterm 2: March 6 (Thursday)

Midterm 3: April 17 (Thursday)

**Comprehensive Departmental Final:** The **comprehensive departmental final will be worth 30% of your final grade.** This exam will be given on **Monday, May 12 from 4:30-6:30pm.** NO CHANGES CAN BE MADE IN THE FINAL EXAM TESTING SCHEDULE, PLEASE PLAN ACCORDINGLY. If you have a conflict with the final exam time, you should drop the course and take it another semester.

**GRADING SCALE:** A 90-100%, B+ 85-89%, B 80-84%, C+ 75-79%, C 70-74%, D 60-69%, F below 59%.

**COURSE OBJECTIVES:** The purpose of this course is to study the theory and applications of linear algebra. Thus we will

- (1) Study systems of linear equations and how to solve them,
- (2) Study matrices and how to compute with them,
- (3) Develop the theory of vector spaces and how they relate to matrices and systems of linear equations ,
- (4) Develop the language of linear transformations, and
- (5) Develop the important theorems of linear algebra.

**Please be sure that all cell phones are in the OFF position during class.**

**FINAL EXAM: May 12, 4:30 - 6:30pm**

**Sec 1.1 and 1.2**

p 11 4,7,8,9,11,14,17,21,23,24,25,  
p 25 1,11,13,17,21,22,23,24,25

**Sec 4.4 and 4.5**

p 260 3,7,9,12,13,19-21,23,25,27

**Sec 1.3 and 1.4**

p 37 2,4,5,8,9,12,14,16,17,19,23,24,25,26,29  
p 47 1-5,7,11,13,14,17,21,22,23,24,25,26,29,30,37,38,39

**Sec 4.5 and 4.6**

p 269 3,7,9,13,14,15,17,18,20,26,28

**Sec 1.4, 1.5, and 1.7**

p 55 2,6,11,12,29,30,31,32,35,36  
p71 1,3,5,7,9,11,13,15,17,19,21-24,26-28,33-38

**Sec 5.1 and 5.2**

p 308 6,8,14,16-18,21,22,25,29,30  
p 317 11-18,20-22

**Sec 1.7 and 1.8**

p 80 3,5,7,9,12,13-16,21,22,30,33,34,37

**Sec 5.3**

p 325 2,4,6,12,15,17,20-25,27,28

**Sec 1.9 and 2.1**

p 90 2,3,5,11,13,15,19,22-24,33  
p 116 1,4,5,7,9,10,17,18,20,21,23-25

**Sec 6.1 and 6.2**

p 382 3,5,7,10,17-20,24,27,29,31

**Sec 2.1 and 2.2**

**P 126 3,7,9,10,11,13,17,19,21,31,32**

**Sec 2.2 and 2.3**

**p 132 2,3,4,7,8,13,15,17,20,27,28  
29,33**

**Sec 2.8**

**p. 173-175 5,7,15,17,23,25,26,37**

**Sec 2.9**

**p. 180-182 1,3,5,9,11,13**

**Sec 3.1**

**p 190 3,7,11,15,19,21,23,25,27,29,33-37,40**

**Sec 3.1 and 3.2**

**p 199 1,2,3,7,15,17,19,23,25,27,28,31,33,35,39**

**Sec 3.3**

**p 209 1,3,5,11,13,15 (note adjucate=adjoint).**

**Sec 4.1**

**p 223 1-3, 7,11,13,17,23,24,33**

**Sec 4.1 and 4.2**

**p 234 1,5,9,11,15,17,21,24-26, 28,33**

**Sec 4.2 and 4.3**

**p 243 1,4,5,7,10,17-22,24,33**

**Sec 4.3 and 4.4**

**p 253 3,7,13,15,16,18,19,27,29,32,33**

**Sec 6.2 and 6.3**

**p 392 4,6,9,10,12-14,17,21-24,26  
p 400 2,4,8,10,11,17**

**Sec 6.3 and 6.4**

**p 407 9-11,17,18,24**

**Sec 6.4 and 6.5**

**p. 416 1,2,9,13,15,25**

**Sec 6.5 and 7.1**

**p 454 8-12,19,21,22,25-30**

**Sec 7.1 and 7.2**

**p 462 1, 3,8,11,26**