## SECTION 01 (3 Credits) SYLLABUS MATH 250 FALL 2012

**COURSE:** Introductory Linear Algebra.

PREREQUISITE: Rutgers Calculus II, 01 640 152, 136, or 138, or the equivalent.

INSTRUCTOR: Gus Rainsford EMAIL ADDR: rainsfor@math.rutgers.edu

**OFFICE HOURS:** Room: Hill 208. Unless announced otherwise: "drop-in" on Mondays, Tuesdays and Thursdays 3:00-4:30, by appointment on Fridays 3:00 - 4:00. Office hours may be possible on some Wednesdays by appointment.

**TEXT:** Elementary Linear Algebra, A Matrix Approach, 2nd edition

Author: Spence, Insel, Friedberg Publisher: Prentice Hall Publishing, ISBN 978-0-13-187141-0.

## Note 1: (change of class days)

On Tuesday November 20, Rutgers will follow Thursday's schedule of classes.

On Wednesday November 21, Rutgers will follow Friday's schedule of classes.

**CALCULATOR/CELL PHONE/LAPTOPS/ETC :** Calculators, cell phones, laptops and related devices are not permitted on exams or quizzes. Cell phones, laptops, headsets, and related devices are not to be used in class (no texting).

GRADING: Quizzes: 50 pts Homework 50 pts Exam 1: 100 pts Exam 2: 100 pts Final: (comprehensive) 200 pts Total: 500 pts

**EXAMS:** Exams are closed book: no notes, or books etc are permitted. Calculators, cell phones and other related electronic devices will not be used on the exams. You may not leave the room and then return to finish the exam. If Rutgers cancels classes, (for snow storms etc), on the day of an exam, the exam will be given on the first day we meet when our class resumes.

Midterm I is *tentatively* scheduled for Thursday October 4.

Midterm II is *tentatively* scheduled for Thursday November 15.

Please note: Firm dates for Midterm Exams exams will be announced in class.

The Final Exam will be comprehensive.

It will be held 8:00 AM - 11:00 AM on Monday December 17.

The room for the final will be announced in class.

MISSED EXAMS: Makeup exams are not given; there are no exceptions. If you are absent on the day of an exam (for some acceptable reason), you must bring in a formal letter from the dean's office which verifies the reason for your absence is valid in order for your absence to be excused. For such an excused absence, the pertinent portion of the final will count for the missed exam. Missed exams, which are not excused, are recorded as a 0 grade.

In addition, within 3 days of the missed exam, please use the online absence reporting system at https://sims.rutgers.edu/ssra/ to record your absence and send me an email.

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**CLASS PARTICIPATION:** You are responsible for attending all class meetings. Poor attendance will be a factor in deciding borderline grade situations. You are responsible for all material covered in lecture as well as all announcements made in lecture. Homework assignments, and announcements regarding quizzes and exams, etc. will not be sent to students via email or phone. Make arrangements with other students to get lecture notes and any announcements in the event you miss lecture. Not knowing the day of an exam is NOT an acceptable excuse for missing the exam.

**SPECIAL NEEDS:** If you require special accommodations during exams or in class, you must see the Rutgers Office of Disability Services and discuss your case with them. Requests for special accommodations will NOT be honored without a letter from the Rutgers Office of Disability Services requesting the accommodations. Such letters must be presented in a time frame sufficient to allow for the accommodation to be met. To insure your needs will be met this semester, please see the Dean of Disabilities Services ASAP. For more information go to http://disabilityservices.rutgers.edu

**ACADEMIC INTEGRITY:** Students are expected to do their own work and abide by the restrictions regarding calculators and testing aids such as formula sheets. Violations will result in a zero grade for the workshop, quiz, homework, or exam in question and possible failure for the course and or further academic discipline for all involved.

**QUIZZES:** Quizzes will be given throughout the semester. The dates for the quizzes will be announced in class. They will be given at the end of the class and will be based on the homework problems and class notes. Makeup quizzes will not be given under any circumstances. Missed quizzes are given a grade of zero. Since we realize that at times, you may have reason to miss class, we allow you to miss two quizzes. If you take all of the quizzes, we will drop your two lowest scores.

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**HOMEWORK and PRACTICE PROBLEMS:** Students are encouraged to do all the problems as they are practice problems for exams and quizzes. Selected Homework problems will be collected and graded as announced in class. Late homework assignments are not accepted. Since we realize that at times, you may have reason to miss class, we allow you to miss two homework assignments. If you hand in all of the homework, we will drop your two lowest scores.

PLEASE NOTE: Practice problems may not be restricted to this list. Any additional problems that are assigned will be announced in lecture. (**TF: indicates true-false questions**)

## Homework/Practice Problems

- **1.1** 1 31 odd, **TF: 37-56**, 71, 75, 79, 81, 82
- **1.2** 1-43 odd **TF:** 45-63, 67, 68, 75, 76, 77, 78
- 1.3 1-55 odd TF: 57-76, 81
- **1.4** 1-43 odd **TF: 53-72** 74-78, 81-84, 87-91
- **1.6** 1-43, odd **TF:** 45-64 70, 72
- **1.7** 1-57, odd **TF:** 63-82, 87,89
- **2.1** 5,7,9,11,13,15,17,19,22,23,25,27,29,31, **TF: 33-50**
- **2.3** 1, 3, 9, 11, 13, 17, 19, 23, 25, 29, 31 **TF: 33-52**, 54, 59, 61, 67, 69, 71, 83
- **2.4** 1, 3, 7, 9, 19, 27, 29 **TF: 35-54**, 64
- **2.5** 1, 3, 9
- **2.6** 1, 3, 5, 9, 11, 13, **TF: 33-41**, 42, 43, 44, 45, 46
- **3.1** 1, 3, 9, 11, 13, 14, 15, 21, 23, 27, 29, 31, 37, 43 **TF:** 45-63
- **3.2** 5, 6, 7, 8, 11, 13, 17, 21, 27, 33, 59, 63, 67, 69 75 **TF: 39-58**,
- **4.1** 1, 3, 5, 9, 11, 13, 19, 21, 27, 29, 33, 67, 69, 72, 73, 74, 78, 81, 83, 85, 89, 93 **TF: 43-51, 57-62**
- **4.2** 1, 3, 5, 7, 17, 19, 21, 25, 27 **TF: 33-50**, 53, 54, 59, 63, 65
- **4.3** 1, 3, 5, 7, 9, 11, 15, 17, 19, 25, 27 **TF: 41-57,59-60**, 63, 65, 69, 73 78, 83
- **5.1** 1, 3, 7, 9, 13, 17, 23 **TF:** 41-46, 55-60 63, 64, 66, 67, 68, 69, 72, 73, 74
- **5.2** 1, 5, 9, 11, 13, 15, 17, 19, 21, 41 **TF: 53-72**, 77, 79, 81, 85, 86
- **5.3** 1, 3, 5, 7, 11, 15, 17, 19 **TF: 29-48**, 49, 51, 55, 57, 61, 63, 65, 73, 77, 78, 81, 82, 83, 85
- **6.1** 3, 5, 7, 9, 11, 13, 15, 17, 25, 29, 33, 37, 43, 49, 51, 53 **TF:** 61-80, 95, 97, 98
- **6.2** 1, 3, 7, 9, 13, 17, 21, 25, 29, 33, 37 **TF:** 41-52, 55
- 6.3 1,3,5,9,11,17,19,21 TF: 33-56, 59,61,67,69,71,73,75
- 6.4 1,5,17,21, **TF: 28-32**
- 6.5 3,7,9,11, TF: 17, 21-29
- 6.6 3, 5, 13, 15, 17, 19, **TF: 21-40**