#### COURSE SYLLABUS - FIRST COURSE IN LINEAR ALGEBRA **MAT 331** Fall 2016 Sections M001&M004

**Instructor:** Paul Tuttle, 207 Carnegie Hall, pgtuttle@syr.edu, 243-4808 (cell - Please text)

## Office Hours:

• Tuesday: 2:30 pm – 4:30 pm • Thursday: 2:30 pm – 4:30 pm

I am available after class. If I find these hours to be inadequate, I will add extended office hours. Also, I'm available outside of these hours by appointment.

Course Supervisor: Professor Jeffrey Meyer, 206F Carnegie, 315-443-1479, lmeye01@syr.edu. Please inform your instructor of any problems that you have with this course. Problems not satisfactorily resolved with your instructor should be brought to the attention of the course supervisor without delay.

## **Course Hours:**

Sect: M001 Monday-Wednesday, 2:15 pm-3:35 pm, Carnegie 100 Sect: M004 Monday-Wednesday, 12:45 pm-2:05 pm, Carnegie 100

**Course Information:** Course Description: Linear equations, Linear transformations, Matrices, *n*-dimensional Euclidean spaces, Associated geometry.

Course Restrictions: Credit will not be given for both MAT 331 and MAT 485.

Prerequisites: MAT 286 or MAT 296

**Textbook:** Linear Algebra and its Applications, 5th edition, by David C. Lay, Steven R. Lay, and Judi J. McDonald; Publisher, Addison-Wesley

Calculator Policy: You are NOT allowed to use a graphing or symbolic calculator on homework, quizzes or exams for this class. In particular, no use of calculators will be permitted on quizzes or exams. (Note: On a case-by-case basis, some problems will be marked "Use Calculator")

**Exams**: There are two in-class exams, tentatively scheduled on

Thursday, 3 Oct 2016 Thursday, 16 Nov 2016

If you need to take a break during exams, leave your cell phone on the table. Pick it up upon your return.

The Final exam is on

Sect M001: 14 Dec 2016 (Wednesday), 8:00am – 2:30pm, Carnegie Room 200

Sect M004: 14 Dec 2016 (Wednesday), 8:00am – 2:30pm, Carnegie Room 100

It is comprehensive. There are no make-up semester exams, and the *Final exam will not be given at any other time*. Do not plan on leaving campus before 3 pm on this day.

**Homework and Quizzes**: Homework is assigned approximately weekly. Late homework will not be accepted. The two lowest homework scores will be dropped. Homework will be graded based on my selection of one or two representative, randomly selected, problems (depending on the length of the assignment).

Quizzes will be held approximately weekly. There are no make-up quizzes. The two lowest quiz scores will be dropped.

**Grading Policy:** The Final grades will be computed as follows:

- 2 Exams 25% each
- Homework 5%
- Quizzes 15%
- Final 30%

The final grade will be given according to the following scale:

A (93-100) A- (90-92) B+ (87-89) B (83-86) B- (80-82) C+ (77-79) C (73-76) C- (70-72) D (60-69) F (0-59)

**Attendance:** You are expected to attend class and to participate in it. If you miss a class, you are responsible for obtaining notes and any announcement from that class from another student.

### All Class Related Material is on Blackboard

**Students with Disabilities:** If you believe that you need accommodations for a disability, please contact the Office of Disability Services (ODS), <u>disabilityservices.syr.edu</u>, located at 804 University Avenue, room 309, or call 315.443.4498 for an appointment to discuss your needs and the process for requesting accommodations. ODS is responsible for coordinating disability-related accommodations and will issue "Accommodation Authorization Letters" to students as appropriate. Since accommodations may require early planning and generally are not provided retroactively, please contact ODS as soon as possible. Do not wait until just before the first test.

Academic Integrity: Syracuse University's academic integrity policy reflects the high value that we, as a university community, place on honesty in academic work. The policy defines our expectations for academic honesty and holds students accountable for the integrity of all work they submit. Students should understand that it is their responsibility to learn about course-specific expectations, as well as about university-wide academic integrity expectations. The university policy governs appropriate citation and use of sources, the integrity of work submitted in exams and assignments, and the veracity of signatures on attendance sheets and other verification of participation in class activities. The policy also prohibits students from submitting

the same written work in more than one class without receiving written authorization in advance from both instructors. The presumptive penalty for a first instance of academic dishonesty by an undergraduate student is course failure, accompanied by a transcript notation indicating that the failure resulted from a violation of academic integrity policy. The presumptive penalty for a first instance of academic dishonesty by a graduate student is suspension or expulsion. SU students are required to read an online summary of the university's academic integrity expectations and provide an electronic signature agreeing to abide by them twice a year during pre-term check-in on MySlice. For more information and the complete policy, see <a href="http://academicintegrity.syr.edu">http://academicintegrity.syr.edu</a>.

Religious Observances: Syracuse University's religious observances policy, found at http://supolicies.syr.edu/emp\_ben/religious\_observance.htm, recognizes the diversity of faiths represented among the campus community and protects the rights of students, faculty, and staff to observe religious holy days according to their tradition. Under the policy, students are provided an opportunity to make up any examination, study, or work requirements that may be missed due to are religious observance provided they notify their instructors before the end of the second week of classes. For fall and spring semesters, an online notification process is available through MySlice (Student Services -> Enrollment -> My Religious Observances) from the first day of class until the end of the second week of class.

# **Assigned Homework (Preliminary)**

# Section Suggested Problems

- 1.1 11, 13, 15, 17, 19, 23, 24, 25
- 1.2 2, 5, 6, 11, 15, 19 (find all such values of h and k), 21, 25, 26
- 1.3 9, 11, 13, 17, 21, 23 (b-e), 25 (b, c)
- 1.4 1, 3, 7, 9, 11, 15, 17, 19, 21, 23 (b-e), 31, 33
- 1.5 1, 7, 11, 23, 29, 30, 31, 32
- 1.7 1, 5, 7, 9, 11, 15, 17, 19, 21, 31
- 1.8 1, 3, 5, 7, 8, 9, 13, 15, 17, 19, 21, 27
- 1.9 1, 3, 5, 7, 9, 17, 19, 23
- 2.1 1, 3, 5, 7, 11, 12, 15, 19, 20, 27, 28
- 2.2 1, 5, 9, 13, 15, 21, 22, 24, 31, 32, 33, 35
- 2.3 4, 8, 11, 13, 14, 15, 16, 17, 33, 35
- 2.7 2, 3, 5, 7
- 2.8 1, 3, 5, 7, 9, 11, 13, 15, 17, 21, 23, 25
- 2.9 1, 3, 5, 9, 11, 13, 15, 16, 17, 19, 20, 21, 22
- 3.1 9, 11, 13, 15, 17
- 3.2 15, 17, 19, 29, 31, 34
- 3.3 19, 21, 23, 27, 28
- 5.1 3, 5, 9, 13, 15, 17, 18, 19, 21, 25, 29
- 5.2 1, 3, 5, 7, 13, 15, 16
- 5.3 7, 9, 11, 13, 17, 21, 23, 25
- 6.1 5, 7, 9, 11, 15, 17
- 6.2 1, 5, 9, 11, 13, 15
- 6.3 3, 5, 7, 9, 11, 13
- 6.4 3, 5, 7, 9, 11