

## MATH 203-002: Linear Algebra

### Syllabus, Fall 2018

**Course goals.** To understand and be able to make use of linear equations, the concepts of matrix, determinant, vector space, eigenvalue and eigenvector, matrix diagonalization, length, orthogonality, and approximation.

**Prerequisite.** Grade C or better in MATH 114.

**Textbook required.** Lay, Lay, McDonald, *Linear Algebra and its Applications*, 5th edition, Addison-Wesley, 2016.

**Material to be covered.** Chapters 1-6 (with some sections omitted).

**Lectures.** TR, 1:30 pm–2:45 pm, Robinson Hall, Room B104.

**Instructor.** Dr. Valeriu Soltan. Office: Exploratory Hall, Room 4202. Email: [vsoltan@gmu.edu](mailto:vsoltan@gmu.edu)

**Office hours.** TR, 11:00 am-1:00 pm, or by appointment.

**Lecture materials and syllabus.** They are available at [http://math.gmu.edu/faculty\\_staff/soltan.htm](http://math.gmu.edu/faculty_staff/soltan.htm)

**Homework.** Problems for the homework are given in the course outline (see next page). Although these will not be collected, success in tests and final exam strongly depends on their completing and understanding.

**Tutoring.** Free tutoring is available at Math Tutoring Center (Johnson Center, Room 344); for hours of operation, visit <http://math.gmu.edu/tutor-center.php>.

**ODS.** If you are a student with a disability and you need academic accommodations, please see me and contact the Office of Disability Services. All academic accommodations must be arranged through this office.

**Tests and exam.** There will be three tests and final exam. All tests and the final are closed-book and closed-notes. Calculators are allowed.

**Important days.** Tests (tentatively, September 20, October 22, and November 20), Fall break (October 9), Thanksgiving recess (November 21-25), last day of classes (December 8), final exam (December 18, 1:30 pm–4:15 pm).

**Grading.** Tests are 20% each, and final exam is 40% of the total score. Your grade for the course is the sum of scores for tests and final exam. There is no curving, dropping, extra crediting, etc. Equivalence between scores and letters, recommended by GMU, is given in the table below.

A+	A	A-	B+	B	B-	C+	C	C-	D	F
100-97	96-94	93-90	89-87	86-84	83-80	79-77	76-74	73-70	69-60	59-0

**Attendance and make-ups.** Each student is expected to come to class regularly. No make-ups for tests are allowed unless you provide a serious written excuse. Excused tests should be taken within a timely fashion before the last day of classes.

**GMU policies on final exams.** The final exam may not be given during the last week of classes. If you need to change the date of your final exam for unusual circumstances or because you have three or more finals scheduled in one day, you have to obtain professor's approval at least a week prior to the last day of classes. Retaking final exams is not permitted.

Absence from the final exam will not be excused except for sickness on the day of the exam confirmed by physician's note or for other causes approved by the student's academic dean or director. If a student missed the final exam due to illness or a family emergency, an incomplete grade (IN) may be assigned provided the student took all three tests with a total score 36 or higher. If absence from the final exam is unexcused, the grade for the course is F.

**Academic integrity and university policies.** Mason is an Honor Code university; please see the University Catalog for a full description of the code and the honor committee process. Other policies are available at <http://universitypolicy.gmu.edu/>. Students are responsible for knowing and following established policies.

## COURSE OUTLINE

Sections	Homework Problems
1.1	1, 3, 5, 7, 9, 11, 13, 15, 17
1.2	1, 3, 7, 9, 11, 13
1.3	1, 3, 5, 9, 11, 13
1.4	1, 3, 5, 7, 9, 11, 13, 15, 17, 19, 21
1.5	1, 3, 5, 7, 9, 11, 13, 15, 17, 19, 21
1.7	1, 3, 5, 7, 15, 17, 19
1.8	1, 3, 5, 7, 9, 11, 13, 15, 17, 19
1.9	1, 3, 5, 9, 15, 17, 19, 21, 25, 27
2.1	1, 3, 5, 7, 9, 11, 27
2.2	1, 3, 5, 7a, 29, 31, 33
2.3	1, 3, 5, 7, 33
2.8	1, 3, 5, 7, 9, 11, 15, 17, 19, 23, 25
2.9	1, 3, 5, 9, 11, 13, 15
3.1	1, 3, 5, 7, 9, 11, 13, 19, 21, 23
3.2	1, 3, 5, 7, 9, 11, 13, 15, 19, 19, 21, 23, 25
3.3	1, 3, 5, 11, 13, 15, 19, 21, 23, 27
4.4	1, 3, 5, 7, 9, 11
4.7	1, 3, 5, 7, 9
5.1	1, 3, 5, 7, 9, 11, 13, 15, 17
5.2	1, 3, 5, 7, 9, 11, 13, 15, 17
5.3	1, 3, 5, 7, 9, 11, 13, 15, 17
6.1	1, 3, 5, 7, 9, 11, 13, 15, 17, 23
6.2	1, 3, 5, 7, 9, 11, 13, 15, 17, 19, 21
6.3	1, 3, 5, 7, 9, 11, 13, 15, 17
6.4	1, 3, 5, 7, 9, 11
6.5	1, 3, 5, 7, 9, 11, 13