



# LINEAR ALGEBRA

— MA 242 —

---

<b>Lectures</b>	<b>MWF 9-10 am</b> (MCS B33)
<b>Web</b>	<a href="http://www.dam.brown.edu/people/mchb/la/ma242.html">http://www.dam.brown.edu/people/mchb/la/ma242.html</a>
<b>Instructor</b>	Martina Chirilus-Bruckner
<b>Email</b>	<a href="mailto:martina.ma.242@gmail.com">martina.ma.242@gmail.com</a>
<b>Office</b>	MCS 238
<b>Phone</b>	(617) 353 - 1491 ! email preferred !
<b>Discussion (C2)</b>	<b>W 2-3pm</b> (MCS B33)
<b>Office hours</b>	<b>Tuesday and Thursday 11:00-11:50 am</b> (MCS 238)

## Course guide lines

### Homework

Homework will be assigned every week on Wednesday (if not announced otherwise) and is due a week later during the discussion section which is mandatory to attend. Each student has to hand in homework separately. But it is encouraged to work in groups! **Late homework cannot be accepted.** The 2 lowest homework scores will be dropped.

First homework will be assigned January 23, 2013.

### Discussion section

Each discussion section – **W 2-3pm** (MCS B33) – will start with a quiz (if not announced otherwise), whose solutions will be discussed right afterwards. The new homework will be assigned at the end. First discussion section will be January 30, 2013.

**Tentative date for Midterm** **March 04, 2013**

**Final Exam week** **May 06–10, 2013**

### Final Grade Components

---

<b>Final Exam</b>	40 %
<b>Midterm</b>	30 %
<b>Homework</b>	20 %
<b>Quizzes</b>	10 %

# Syllabus

Rough tentative outline of the course material

## 1. **Linear equations and transformations**

- row reduction
- solution sets of equations
- linear transformations

## 2. **matrix algebra**

- matrix operations
- invertible matrices

## 3. **vector spaces**

- subspaces
- bases and dimension

## 4. **eigenvalues and eigenvectors**

- eigenspaces
- diagonalization

## 5. **orthogonality**

## Textbook ( make sure it is the right edition !)

David C. Lay

**Linear Algebra and its Applications**

**4th edition**

Addison-Wesley, 2012, ISBN number 9780321385178.

## Academic conduct

Your work and conduct in this course are governed by the Boston University Academic Conduct Code which can be found here:

[www.bu.edu/academics/files/2011/08/AcademicConductCode.pdf](http://www.bu.edu/academics/files/2011/08/AcademicConductCode.pdf)

This code is designed to promote high standards of academic honesty and integrity as well as fairness. It is your responsibility to know and follow the provisions of the code. In particular, all work that you submit in this course must be your original work. If you have a question about any aspect of academic conduct, please ask.

## Last drop date

Students cannot withdraw from a course after the tenth week of the semester.