

# Course plan

## Linear Algebra II

### Lecturer

Martin Herschend  
E-mail: martin@math.nagoya-u.ac.jp  
Telephone: 052 789 5612  
Office: A-331, School of Science, Building A

### Teaching Assistant

Liu Yu  
E-mail: recursive08@gmail.com

### Website

<http://www.math.nagoya-u.ac.jp/~martinh/linAlg2/>

### Literature

Otto Bretscher. *Linear Algebra with Applications*, Prentice Hall, 2008. ISBN 0136009263.

### Schedule

The following schedule is tentative. Please check the website for updates.

Lecture	Date	Topic	Chapters
1	April 17	Image and Kernel	3.1
2	April 24	Subspaces of $\mathbb{R}^n$	3.2
3	May 1	Dimension	3.3
4	May 15	Coordinates	3.4
5	May 22	Linear Spaces and Transformations	4.1, 4.2
6	May 29	The Matrix of a Linear Transformation	4.2, 4.3
7	June 5	<b>Midterm Exam</b>	
8	June 12	Orthogonal Bases	5.1, 5.2
9	June 19	Orthogonal Transformations	5.3
10	June 26	Eigenvalues and Eigenvectors	7.1
11	July 3	Characteristic polynomials	7.2
12	July 10	Eigenbases	7.3
13	July 17	Diagonalization	7.4
14	July 24*	Review	3, 4, 5, 7
15	July 31	<b>Final Exam</b>	

\*The lecture on July 24 will be in period 3 instead of the regular period 2.

### Examination

There will be a midterm exam on June 5, 2012 and a final exam on July 31, 2012. The midterm exam will give a maximum of 40 points and the final exam a maximum of 50 points. In the beginning of each lecture except the first, the midterm exam and the final exam there will be a small quiz on problems given the lecture before. From these a maximum of 10 points can be earned. The final grade will be determined by the total amount of points obtained according to the following scale: S: 90-100, A: 80-89, B: 70-79, C: 60-69, F: 0-59.