	Lecture Monday 10:15-11:45	Practical course Monday 12:15-13:45	Lecture Saturday 10:15-11:45
1st week	Gauss elemination, vector spaces, linear independence, basis,		
2nd week	basis transzform, linear transformation, determinant	Linear algebra I	
3rd week	eigenvalues, eigenvectors, scalar product, orthogonal matrices, symmetric matrices, Gram-Schmidt orthogonalization,		
4th week	trace, quadratic form, Gauss-Jordan elemination,	Linear algebra II	
5th week	fundamental subspaces, dimension theorems, orthogonal projections,		
6th week	method of smallest squares, positive definit matrices, singular values, polar decomposition, spectral decomposition,	Linear algebra III	primitive function, Riemann integral, properties, Fourier series
7th week	sine Fourier-series, vibrating string, Bernoulli solution,		
8th week	midterm test	Partial diff. eq. I	
9th week			
10th week	D'Alambert's solution, infinite length rod, Heat equation	Partial diff. eq. II	
11th week	vector analysis, line integral, conservative fields,		
12th week	Curl-test on plane, on space, potential function, surface integrals,	vectoranalysis I	
13th week	Gauss theorem, Stokes theorem		
14th week	Green theorem, surfaces	vectoranalysis II	