

ODEs - 104285. Semester: Spring. Year: 2014

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The course is identical to my book (in English) which is available in the present part of my homepage. The figures to the book (very important) are separate scanned files, also available in my homepage.

Do not expect that this course is only about the ways to solve ordinary differential equations – I will devote to this note more than 1/2 of the course. At least 1/2 of the course and at least 1/2 of the tests will be devoted to qualitative theory (how to get valuable information about solutions of ODE's without solving them).

Understanding of this course requires: good knowledge of complex numbers, integrals (definite, indefinite, convergence), series (including functional series), linear algebra (eigenvalues, eigenvectors, diagonalization) and other topics you learned during the first two semesters.

Midterm: May 11 (Sunday), lecture time, 1 hour, magen 20 %

Homeworks: every teaching-day-Sunday (starting March 9) you will have a HW assignment (exercises from my book) to be turned in by next Sunday. Magen 10 %.

Final tests: July 3, October 20

There is **no** moodle-site for this course. All necessary information will be available in my homepage.

Additional books

Uri Eliash, Introduction to ODEs. Math Faculty, Technion, 2009 (Hebrew)

W.E. Boyce, R.C. DiPrima, Elementary differential equations..... (English)

V.I. Arnol'd, ODE's (English, Russian) (masterpiece, but very difficult)