

Syllabus
Analytical Electrodynamics
77401
Spring 2017

- Instructor: Maxim Khodas
Office: Danciger B, 211 (the map is available through the website)
Webpage: <http://phys.huji.ac.il/~maxim.khodas>
The attendance of classes is not required but strongly recommended.
- Office hours of the instructor:
 - Wed 12pm - 1pm
 - Tue 4pm - 5pm
- TA: Mr. Eli Engelberg
Solving the homework assignments is essential for the understanding of the material.
- Grading scheme.
 - Homework – 25 % (distributed weekly);
Only the best 10 out of all assignments will be included in the calculation of the final grade.
The assignments submitted after the due date will **not** be graded.
 - Midterm A will take place on March 14th – 5 % (magen);
 - Midterm B – 10% (magen); Final exam – 60%

Textbooks used for the course:

1. J. D. Jackson, “Classical Electrodynamics”, 3rd edition, abbreviated as J.D.J.
This is the main textbook for the course.
2. Andrew Zangwill, “Modern Electrodynamics”, 1st edition, abbreviated as A.Z.
This book contains lots of modern style problems and applications. I will use it heavily when discussing magnetic matter.
3. L.D. Landau and E.M. Lifshitz “The Classical Theory of Fields” (Volume 2 of A Course of Theoretical Physics).
This is a wonderful text especially when it comes for relativity. I will rely on it in part when discussing radiation.
4. David J. Griffiths, “Introduction to Electrodynamics” is a wonderful resource that may help you to get started in case you have to refresh the material learned in the previous course on electromagnetism.

Other useful references:

1. Philip M. Morse and Herman Feshbach, “Methods of Theoretical Physics”.
2. G. Arfken and H. Weber, “Mathematical Methods for Physicists”.