

Mathematical methods in chemistry

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Course schedule

Tuesdays	09h15 – 11h00	GC A3 30	Lectures
Wednesdays	16h15 - 18h00	CM 1 221	Exercises
Mondays	17h00 – 18h00	BCH 3138	TA office hours
Thursdays	13h00 – 14h00	BCH 3111	Teacher office hours

All the links can also be found on Moodle!

Content (Part I):

Laplace transform, convolution, and solution of ordinary differential equations
Fourier series, separation of variables, and solution of partial differential equations
Fourier transform
Applications of integral transforms in chemical engineering and physical chemistry

Book:

P. Dyke, An introduction to Laplace transforms and Fourier series, Springer, 2014

(The e-book version is free through EPFL library. I recommend ordering a printed “MyCopy” version for only 25.-, again thanks to the EPFL subscription).

Grading (Part I):

Homework 1 and 2: 30%
Midterm exam: 70%