

**Syllabus for Chemistry 8565: “Chemical Reaction Dynamics”
Spring Semester 2017, two credits**

11:15–12:30, Mondays and Fridays (1/20/2017 – 3/10/2017), 283 Kolthoff

Instructor:

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Office hours: usually available after lectures

Preferred method of contact: in person

TA: none

Prerequisite:

Undergraduate physical chemistry course

Description of the course:

The description is as follows:

Fundamentals of chemical reaction dynamics including potential energy surfaces, collision theory, statistical mechanical background and transition state theory, variational transition state theory, activation energy, tunneling, unimolecular reactions, energy transfer, reactions in solution, solvation free energy, potential of mean force, quasithermodynamic treatment, diffusion control, Kramers' theory, and photochemistry

The course will be literature based, without a textbook.