

Advances Kinetics (Chemical Kinetics and Dynamics)

Term: First Term 1397-98

Lecturer: Dr. Mehdi Shahraki

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Lecturing Time: Sat. (7:30-9:30) and Mon. (7.30-9:00)

Assessments: 30% Midterm

50% Final Exam

10% Quiz

10% Home Works

References:

- 1) An Introduction to Chemical kinetics (Margaret Robson Wright)
- 2) Chemical Kinetics and Mechanism (Taylor and Mortimore)
- 3) Kinetic and Mechanism (J.W. Moore and R.G. Pearson)

Subjects:

1. Review of principles of chemical kinetics
2. Kinetics of simple reactions
3. Kinetics of complex reaction
4. Principle of microscopic reversibility
5. Mechanism and procedures
6. Unimolecular reaction
7. Collision Theory
8. Transition state theory
9. Autocatalysis reaction
10. Temperature effect
11. Experimental methods
12. Problems