

Title of the course: Basics of nuclear sciences

Ffen173

Credits: 2

Coordinator: Süvegh, Károly

Department: Department of Analytical Chemistry

Pre-requisites: Knowledge of math and physics at a chemistry BSc level

Topics covered by the course:

Size of the nucleus, mass and charge density of nuclei, nuclear spin and magnetic moment, constituents of nuclei, nuclear force, stable nuclids, nuclear reactions, radioactivity, age determination, interactions of radiation and matter, detectors, nuclear reactors.

Literature

Compulsory: -

Suggested:

- Vértes, A., Kiss, I.: Nuclear Chemistry, *Elsevier*, Amsterdam, 1987
- K.S. Krane: Introductory Nuclear Physics, *Wiley*, New York, 1987
- B. Martin: Nuclear and Particle Physics, *Wiley*, New York, 2006