Course title: Selected chapters of the history of chemistry

Lecturer: Tibor Halaši

Status: elective

**ECTS**: 15

# Requirements: none

## Learning objectives

Understanding the role of chemistry within the natural and exact sciences. Development of scientific and philosophical thought of chemists with multidisciplinary and interdisciplinary character.

#### Learning outcomes

Systematic knowledge of inventions and theories that have established chemistry as a natural and exact science.

Syllabus

Theoretical instruction: Research methods in the history of chemistry.

- Knowledge sources in the history of chemistry.
- Chemical aspects of material culture.

- Contributions of auxiliary branches of historical sciences, paleogeography and paleoclimatology to the research in the history of chemistry.

- Origins of chemistry in ancient times.
- Chemistry in the middle ages (the age of alchemy).
- Chemistry of a new era and scientific chemistry.

- Modern chemistry sources: the contribution of differentiation and integration of scientific disciplines to the chemistry development.

- History of chemistry of some European nations and some European countries.
- Biographies of the famous chemists.
- Contribution of the major scientific discoveries to the development of chemistry.
- History and development of famous chemical, educational and research institutions.
- Chemistry Laureates.
- History and development of chemical publications and editions.

- History and development (international, national and local) chemical companies and associations.

#### Suggesested literature:

- 1. Грденић, Д (2001): Повијест Кемије, Нови либер, Школска кнјига, Загреб.
- 2. Bugge, G (1974): Das Buch der grossen Chemiker, Band I, II, Verlag Chemie GmbH, Weinheim.
- 3. Balázs, L. (1996): A kémia tórténete I,II. Nemzetközi tankönyvkiadó, Budapest.
- **4.** Weeks, M.E., Leicester, H.M. (1968): Discovery of the Elements, 7th Edition, Publ. by Journal of Chemical Education, Easton, Pa.

### Leicester, H.M. (1961): The Historical Background of Chemistry, John Wiley and Sons, New York.

Weekly teaching load				Other:
Lectures: 5	Exercises:	Other forms of teaching:	Student research: 5	
Teaching methodology				
Lectures, seminars, consultations, and referral work in the data center, a Roman work.				
Grading (maximal number of points 100)				
Practical teaching 20 points, Seminar 20 points, Oral exam 60 points				