Course title: e-Learning in chemical education
Lecurer: Jasna Adamov
Status: obligatory/elective **elective**
ECTS: 15
Requirements:
Learning objectives Training in the application of information and communication technologies and the design of electronic learning materials in modern chemistry teaching.

Learning outcomes After taking the course, the student should:
General capabilities: demonstrate extensive knowledge of various forms of electronic education in the field of chemical education.
Subject-specific capabilities: Student will be able to
   • demonstrate methodological and practical skills in the design and implementation of electronic educational materials in chemistry in the form of electronic courses.
   • successfully organize and conduct educational research in the field of e-learning and distance learning.

Syllabus *Theoretical instruction* Virtual classrooms in chemistry. Designing electronic chemical labs and metadata. SCORM standard. The application of video conferencing technology in chemical education. Verification and evaluation of e-publications in the e-education. *Students research* Methodical reshaping of traditional study materials into e-materials in chemistry. Design of training materials for chemical online course. Preparation of electronic teaching materials for the teaching chemistry in the regular classroom. The use of videoconferencing technology in education.
Suggested literature: 1. Clark, C., Mayer, R., e-Learning and the Science of Instruction: Proven Guidelines for Consumers and Designers of Multimedia Learning, Pfeiffer; 2011. 2. Allen, M. - Designing Successful e-Learning, Pfeiffer; 2007. 3. Fee, K. -Delivering E-Learning: A Complete Strategy for Design, Application and Assessment, Kogan Page; 2009.

Weekly teaching load				Other:
Lectures: 5	Exercises:	Other forms of teaching:	Student research: 5	

Teaching methodology
lectures, practical exercises, assignments, discussions, seminars, consultations

Grading (maximal number of points 100)
Practical learning 15 points Project 25 points Oral exam 60 points