Course title: Teaching chemistry to gifted students - selected topics

Lecturer: Jasna Adamov

Status: elective

ECTS: 15

Requirements:

Learning objectives

Training of chemistry teachers for care and work with talented students and research of methods of teaching chemistry in working with gifted students.

Learning outcomes After taking the course, the student should:

General capabilities:

- demonstrate extensive knowledge in the field of gifted children education,
- independently produce horizontally and vertically differentiated and enriched curriculum for individualized work with gifted students

Subject-specific capabilities: Student will be able to

- successfully apply Kraetwohl's taxonomy of educational objectives in working with gifted students,
- organize and conduct pedagogical research in the field of education of students gifted for chemistry.

Syllabus

Theoretical instruction

The criteria for the assessment of intelligence. The criteria for identifying gifted students. Special needs of gifted students. Strategies for teaching students gifted for chemistry. Differentiation of content in chemistry: models of differentiated content. The motivation of talented students. Students' research work in chemistry.

Students research

Design of activity program for chemical section in chemistry. Design of differentiated assignments for gifted. Kraetwohl taxonomy of educational objectives.

Suggested Literature:

1. Адамов J. – *Методика наставе хемије у раду са даровитим ученицима* (скрипта са предавања), 2013. 2. Peters, S.- Beyond Gifted Education: Designing and Implementing Advanced Academic Programs, Prufrock Press Inc.Waco, Texas, 2014.

3. Heacox, D. - Differentiation for Gifted Learners: Going Beyond the Basics, Free Spirit Publishing, Minneapolis, 2013.

4. Conklin, W. - Differentiating the Curriculum for Gifted Learners (Practical Strategies for Successful Classrooms), Shell Education, Huntington Beach, CA; 2007

5. Cash, R. -: Advancing Differentiation: Thinking and Learning for the 21st Century, Free Spirit Publishing Minneapolis, 2010

6. Stanley, T. - Project-Based Learning for Gifted Students: A Handbook for the 21st-Century Classroom, Prufrock Press, Inc.Waco, Texas, 2011

7. Winebrenner, S., Brulles, D. - Teaching Gifted Kids in Today's Classroom: Strategies and Techniques Every Teacher Can Use, Free Spirit Publishing, Minneapolis, 2012

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

Teaching methodology

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

Grading (maximal number of points 100)

Projekat 20 points, Seminar 20 points

Oral exam 60 points

Testing knowledge may be different (written exams, usmani exam, project presentation, seminar, etc