

Course Unit Descriptor

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| Study Programme: Doctoral Academic Studies in Environmental Protection, Doctoral Academic Studies in Chemistry | | | |
| Course Unit Title: Drinking Water Quality Control | | | |
| Course Unit Code: DZZS-608 | | | |
| Name of Lecturer(s): Full Professor Jasmina Agbaba, Associate Professor Aleksandra Tubić | | | |
| Type and Level of Studies: PhD degree | | | |
| Course Status (compulsory/elective): Elective | | | |
| Semester (winter/summer): Winter | | | |
| Language of instruction: English | | | |
| Mode of course unit delivery (face-to-face/distance learning): Face-to-face | | | |
| Number of ECTS Allocated: 15 | | | |
| Prerequisites: None | | | |
| Course Aims: Broad knowledge in the field of water resources, preparation and control of drinking water quality and enabling students to perform independent quality control of drinking water. | | | |
| Learning Outcomes: After completing the course, students will be able to independently apply the skills necessary to control drinking water quality, apply their knowledge to modernized conventional and new techniques for the treatment of drinking water. | | | |
| Syllabus: <i>Theory</i> The study of Serbian water strategies. Analysis of drinking water resources in quantitative and qualitative terms, control of drinking water quality, the study of modernized conventional and new techniques for the treatment of drinking water (separation, chemical diffusion methods, water disinfection, treatment by-products); removal of specific substances from water in drinking water preparation. Case studies- problems and solutions. <i>Practice</i> Visit to water treatment plants and study of process efficacy. | | | |
| Required Reading: 1. Kerry J. Howe, David W. Hand, John C. Crittenden, R. Rhodes Trussell, George Tchobanoglous: Principles of Water Treatment, John Wiley & Sons, 2012. 2. John C. Crittenden, R. Rhodes Trussell, David W. Hand, Kerry J. Howe, George Tchobanoglous: Water Treatment Principles and Design, Third edition, MWH Global, Inc., 2012. 3. Degremont, s.a: Water Treatment Handbook, Seventh Edition – 2 Volumes set, Lavoisier SAS, 2007. 4. Geo. Clifford White: Handbook of Chlorination and Alternative Disinfectants, Fifth Edition, John Wiley & Sons, Inc. 1999. | | | |
| Weekly Contact Hours: 10 | Lectures: 5 | Student research: 5 | |
| Teaching Methods: Lectures and desk study projects | | | |
| Knowledge Assessment (maximum of 100 points): 100 | | | |
| Pre-exam obligations | points | Final exam | points |
| Desk study projects presentation | 50 | Oral exam | 50 |