

Course Unit Descriptor

<b>Study Programme:</b> Industrial engineering in exploitation of oil and gas			
<b>Course Unit Title:</b> Chemistry			
<b>Course Unit Code:</b> OAS145			
<b>Name of Lecturer(s):</b> Assistant Professor Nina Djapic, PhD			
<b>Type and Level of Studies:</b> Bachelor Academic Degree			
<b>Course Status (compulsory/elective):</b> Compulsory			
<b>Semester (winter/summer):</b> Summer			
<b>Language of instruction:</b> English			
<b>Mode of course unit delivery (face-to-face/distance learning):</b> Face to face			
<b>Number of ECTS Allocated:</b> 7			
<b>Prerequisites:</b> None			
<b>Course Aims:</b> The high-school level physical science and mathematics (algebra) knowledge will be used in accepting scientific concepts and learn chemical theory, practice and calculus.			
<b>Learning Outcomes:</b> Working through examples and practical cases students will develop their chemical knowledge, critical thinking abilities and solving skills capabilities. The participation in course activities students will be able to gain experience in observation, logic, analysis, precision, objectivity and clear thinking.			
<b>Syllabus:</b>			
<i>Theory</i>			
Providing an introduction to general chemistry. Considers how scientific knowledge is acquired, accepted and applied to explore many key concepts in chemical science. Topics include atomic structure, periodic relationships, chemical bonding, intermolecular forces, stoichiometry, moles, gas laws and thermochemistry.			
<i>Practice</i>			
Laboratory experiments will be performed in order to gain basic good laboratory practice.			
<b>Required Reading:</b>			
1. David E. Goldberg, Fundamentals of Chemistry, Fifth Edition, McGraw-Hill, 2007.			
<b>Weekly Contact Hours: 4</b>		<b>Lectures: 2</b>	<b>Practical work: 2</b>
<b>Teaching Methods:</b>			
Lectures, calculus and laboratory work.			
<b>Knowledge Assessment (maximum of 100 points):</b>			
<b>Pre-exam obligations</b>	points	<b>Final exam</b>	points
Active class participation	10	oral exam	30
Practical work	40		
Preliminary exam(s)	20		