

<b>Module:</b> Modern Aspects of Non-metal Chemistry			
<b>University/department/institute:</b> Freie Universität Berlin/Department of Biology, Chemistry and Pharmacy/Institute of Chemistry and Biochemistry			
<b>Responsible for the module:</b> module lecturers			
<b>Admission requirements:</b> none			
<b>Qualification aims:</b> The students are familiar with the principles of the chemistry of phosphorus and other selected main group elements and can apply their knowledge. They have mastered the nomenclature and know the principle classes of substances, their reactions and the importance of these elements and their compounds in industry, technology and the environment. They can solve problem sets on the topic areas covered independently and in groups.			
<b>Content:</b> Production and properties of phosphorus; structure and importance of the element phosphorus; synthesis, structure and reactivity of phosphorus compounds. Modern concepts of organic phosphorus chemistry; phosphanes and low-coordinated phosphorus compounds and their coordination chemistry; synthesis of P-stereogenic phosphorus compounds and their application in selected homogeneous catalytic reactions. Current aspects of non-metal chemistry of further main group elements			
<b>Teaching and learning units</b>	<b>Attendance</b> (Semester hours per week = SH)	<b>Forms of active participation</b>	<b>Study time</b> (hours)
Lecture I	2	-	Attendance L I 30 Preparation and follow-up L I 45 Attendance L II 15 Preparation and follow-up L II 30
Lecture II	1	-	Examination preparation, 30 examination
<b>Language of instruction</b>		German or English	
<b>Compulsory regular attendance</b>		Attendance recommended	
<b>Study time, total hours</b>		150 hours	5 CP
<b>Duration of module</b>		One semester	
<b>Module offered</b>		Every other semester	
<b>Application</b>		Master's program in Chemistry	