

<b>MNF-chem1002    Advanced Structure Determination of Organic Molecules</b>			
<b>Term</b>	Winter term		
<b>Length</b>	1 term		
<b>Module leader</b>	Prof. Dr. Frank Sönnichsen Telephone 0049-431-880-2455 Email: fsoennichsen@oc.uni-kiel.de		
<b>Degree course</b>	M. Sc. Chemistry, 1 <sup>st</sup> term of study M. Sc. Business Chemistry, 1 <sup>st</sup> – 2 <sup>nd</sup> term of study M. Sc. Biochemistry and molecular biology, 1 <sup>st</sup> term of study M. Ed. Chemistry (2 Subjects), 1 <sup>st</sup> - 3 <sup>rd</sup> term of study	compulsory compulsory elective compulsory	
<b>Advice</b>	Prof. Dr. Frank Sönnichsen		
<b>Courses within the Module</b>	<b>Type of course / Lecturer</b> Lecture course / Prof. Dr. Frank Sönnichsen Exercises / Prof. Dr. Frank Sönnichsen	<b>Lessons per term (SWS)</b> 1 SWS 2 SWS	<b>Status</b> compulsory compulsory
<b>Number of participants</b>	40		
<b>Language</b>	English		
<b>Workload</b>	In class: 42 h Homework: 48 h		
<b>Credit points</b>	5		
<b>Requirements</b>	B. Sc. in chemistry, business chemistry or biochemistry and molecular biology		
<b>Desirable prior knowledge</b>	MNF-chem0302		
<b>Learning aims</b>	Ability to solve the structure of an unknown organic compound with the help of spectroscopic techniques		
<b>Contents</b>	2D-NMR spectroscopy NOE Temperature dependent NMR spectroscopy ESI and MALDI Mass spectrometry Solving exercise problems and answering short questions		
<b>Key qualifications</b>	After the successful completion of this course, students will be able to identify suitable spectroscopic methods for the elucidation of unknown organic compounds. They will be able to analyse the information obtained by these methods and they will be able to present a possible structure of the compound.		
<b>Exams</b>	1 written exam at the end of term (100% of the mark for the module) 1 <sup>st</sup> repeat exam at the beginning of the following term 2 <sup>nd</sup> repeat exam after the end of term of the following term Marks, relevance for M. Sc. Final marks The mark for the module is part of the final M. Sc. Mark, with a weighting factor based on the credit points.		
<b>Literature</b>	Hesse/Meier/Zeeh: Spectroscopic Methods in Organic Chemistry		
<b>Further Information</b>	-		