

课程大纲 COURSE SYLLABUS

1.	课程代码/名称 Course Code/Title	CHE5004/物理有机化学
2.	课程性质 Compulsory/Elective	专业课
3.	课程学分/学时 Course Credit/Hours	3.00/48
4.	授课语言 Teaching Language	中文
5.	授课教师 Instructor(s)	蒋伟
6.	先修要求 Pre-requisites	有机化学、物理化学
7.	教学目标 Course Objectives	
	掌握有机化学反应类型、反应机理、以及分子间相互作用力；并学会采用物理化学的各种手段来研究和解决有机反应的各种问题。	
8.	教学方法 Teaching Methods	
	教学方法：将采取教师讲解与学生讲解共同结合；其中考核方式突出现学现用，活学活用。并在最后采取面试考察的方法对学生进行现场考核。 授课创新点：突出学生的主观能动性，采用 seminar 和 quiz 来调动学生的学习积极性。	
9.	教学内容 Course Contents	
	Section 1	Chapter 1 – Fundamentals (8 hours)
	Section 2	Chapter 2 - Structure and Bonding (4 hours)
	Section 3	Chapter 3 – Reactivity (8 hours)
	Section 4	Chapter 4 - The Influence of the Environment (8 hours)
	Section 5	Chapter 5 - Non-Covalent Interactions (4 hours)
	Section 6	Chapter 6 Student Seminars on More Advanced Topics (16 hours)
	Section 7	
	Section 8	
	Section 9	
	Section 10	
	
10.	课程考核 Course Assessment	
	①考试；②Attendance: I expect that all participants attend the seminar. Seminar: The seminar will expand the topics of the lecture course in seminar talks given by the participating students. The seminar topics provide additional examples for the concepts discussed in the lecture course. Exercises (Quickies): One of the so-called Quickies will be discussed in the beginning of each lecture course/seminar day. Active participation: To pass the course, active participation is one requirement. Active participation means that you give a	

seminar talk AND participate in the discussion of the quickies.
Exam: The course is completed by an oral exam of ca. 30 Minutes which comprises the topics of the lecture course as well as the topics of the seminar. The grade of the oral exam defines the grade for the module. The exam can be individually scheduled with me, but should be taken before the start of the next term.

11. 教材及其它参考资料

Textbook and Supplementary Readings

- N. Isaacs, Physical Organic Chemistry, Longman, Harlow 1995
- E. V. Anslyn, D. A. Dougherty, Modern Physical Organic Chemistry, University Science Books, CA, 2006.