

**全英文课程《Materials Science of Interfaces》**  
**课程表 Curriculum schedule**

Date	Time	Notes
26 Sep – 10 Oct		Registration for the course and the participation of the IFBM 2014 conference
11 Oct – 26 Oct		Reading * and preparing homework. <b>Homework should be returned by October 20</b>
27 Oct	10:50-11:50	Knowledge test
28 Oct	9:45-10:00	Test results and team formation
	10:00-11:00	Lecture 1: How to attend an international conference and learn from the talks given by experts
	11:00-12:00	Lecture 2: Learning and solving problems in a team
	12:00-12:30	Assignment of talks at the IFBM 2014 to student teams, to be reported on seminar day Nov.9
29-31 Oct	IFBM 2014	Class will meet during lunch break of the conference to discuss the lectures and identify problems with understanding.
2 Nov	9:00-11:00	What are Colloids and why are colloidal suspensions stable?
3 Nov	10:30-12:30	Forces between colloidal particles
4 Nov	9:50-11:50	Surface Chemistry, surface tension, and adsorption
5 Nov	9:50-11:50	Properties of Colloids: kinetic properties, rheology
6 Nov	9:50-11:50	Micelles and self assembly I
7 Nov	9:50-11:50	Micelles and self assembly II
9 Nov	Full day	Seminar day: The students present their seminars on topics selected from the IFBM conference.
10 Nov	10:45-12:15	Exam
	16:00-18:00	Return of exam, party, discussions.
11 Nov	11:30-12:30	Reading assignment ** for part II of course in January.

参考书 References

\* 《Thermodynamics》 HJ Kreuzer and I Tamblyn, Dalhousie University,

\*\* 《Colour and The Optical Properties of Materials: An Exploration of the Relationship Between Light, the Optical Properties of Materials and Colour - Second Edition》 Richard J. D. Tilley

- Please send your home work by Oct.20 (Word or pdf file) to [michael.grunze@urz.uni-heidelberg.de](mailto:michael.grunze@urz.uni-heidelberg.de)
- Homework assignments for the student teams will be given out after the lectures and should be returned by Nov.7
- The knowledge test and the final exam will be written closed book exams.
- Students successfully completing the course will receive a certificate.