

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. Homework should be returned by October 20 |
| 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.21 (Word or pdf file) to michael.grunze@urz.uni-heidelberg.de and renkf@zju.edu.cn
- 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.