

Chemistry 268, 2014 Spring
Solid State and Materials Chemistry

Instructor: Yat Li

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Lecture Time and Location: TuTh 8:00 – 9:45 am, Classroom: TBD

Office Hours: PSB 160; Wed 1:30 - 3:30 pm

Required Text:

Solid State Chemistry, Fourth Edition by Lesley E. Smart and Elaine A. Moore
CRC Press, ISBN 978-1-4398-4790-9 (pbk)

Supplementary book:

Basic Solid State Chemistry, Second Edition by Anthony R. West
John Wiley & Sons, ISBN 0-471-98755-7 (hbk); ISBN 0-471-98756-5 (pbk)

Course credit:

Homework Assignment: 60%; Final Exam: 40%

Introduction:

Welcome to Chemistry 268. This class will cover a range of topics including crystal structures, bonding in solids, crystal defects, synthetic methods of solid state materials, materials characterization techniques (e.g., X-ray diffraction, microscopy and spectroscopy methods), properties of solid state materials, and special topics on nanomaterials or nanoscale devices. The concepts taught in this course are instrumental for future studies in many areas of solid state and materials chemistry. We hope that the knowledge derived from this course will give you insight into the chemical workings of our lives and the world around us.

General Policies:

1. We will not accept late homework assignment (zero mark for that assignment).
2. Copying (and being copied) homework assignment will result in zero of the assignment.
3. Cheating in any form in Final will result in zero of the exam.

Communication:

Instructor is happy to take your questions via email and can usually get back to you within a day. Homework sets, grades, supplementary materials and important announcements will be posted on UCSC eCommons (<https://ecommons.ucsc.edu>).

Final Exam: TBD

Exam Policy: You must be present at the exam. A missed exam is treated as a zero in your class record. If you are extremely ill or have other emergency situation and cannot take the exam, you must: **i) contact the instructor before the exam takes place** and **ii) provide documentation from your physician or police**. Arrangements for a make-up exam or alternative will be dealt with on a case-by-case basis.