COURSE SYLLABUS: CH4510, INTERMEDIATE PHYSICAL CHEMISTRY

Fall, 2011

INSTRUCTOR: Prof. Bahne C. Cornilsen
Phone: 487-2295
Email: bccornil@mtu.edu
Office Hours: by Appointment (arrange via email)

TEXT: In-class handouts and a physical chemistry textbook, such as
David W. Ball, Physical Chemistry, 1st Edn.,

The objective of this course is to cover material which is not covered in most junior level physical chemistry courses. This material is important for success at the graduate level, and is part of a solid foundation in physical chemistry.

TENTATIVE COURSE OUTLINE:

1. Introduction and overview
2. The structure of solids
3. Phase diagrams
4. Closest packing in solids
5. Group theory
6. Crystallography and space groups
7. Vibrational spectroscopy of solids

TYPICAL GRADING:

<table>
<thead>
<tr>
<th>Component</th>
<th>Points</th>
</tr>
</thead>
<tbody>
<tr>
<td>Midterm exam</td>
<td>100</td>
</tr>
<tr>
<td>Homework</td>
<td>100</td>
</tr>
<tr>
<td>Final Exam</td>
<td>200</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td>400</td>
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</tbody>
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Exams: For evening exams, there will be class the day of the exam, but no class on another Friday after the exam. There is no predefined scale for the grades on exams. After each exam, the break-points for the grades will be given. Re-grades for any exam must be requested within one week after the return of the exam. All students will be required to take the final exam.

Home Work Problems: Homework will be assigned in class, handed-in, and graded. These will test your understanding of the material and give you experience with the kind of problems that will be on the exams.
EXAM POLICIES

Preparing for the Exam:
NO MAKE-UPS for missed exams. Plan on taking the exam at the assigned times. If you have a valid reason to be absent from an exam (for a field trip, job interview, athletic event, etc.), notify the instructor prior to the exam. If an unanticipated problem makes it impossible to attend an exam, notify the instructor as soon as possible. An extended delay will be considered to be an unexcused absence. An unexcused absence will be an automatic zero for that exam. Excused absences result in the average of your other midterm exams being awarded for the missed exam.

Excused/Unexcused Absences:
• Granted by the Office of Student Affairs. If you know that you will have an official university excused absence on exam day (university athletic event or religious holiday), you are required to make arrangements as early as possible in advance of the exam date.
• Examples of excused absences granted in the past include serious illness (medical excuse required) or a death in the family. Excuses may be documented through the Office of Student Affairs.
• Examples that are NOT excused: travel home or to attend a social event.

Taking the Exam:
• One 3x5 equation card (on Final – two 3x5 equation cards)
• Come on-time and seat yourself promptly in proper test seating arrangement.
• Bring only allowed items. Do NOT bring cell phones, Blackberries, CD players, iPods, PDAs, earphones, or any other electronic devices. Calculators on other devices are strictly prohibited.

Academic Dishonesty
Academic integrity is expected. Any violations will result in a 0 for the course and a recommendation of expulsion from MTU. Policies and procedures are in “Academic Integrity at MTU – A Guide for Students and Faculty.” Specific violations include: copying from another’s work or exam, allowing copying from your work or an exam, or facilitation of any academic dishonesty. Cell phones, Blackberries, iPods, PDAs, or any other electronic devices are not to be used in the classroom. Information exchanges on these devices (or calculators) during class are also prohibited and violate the Academic Integrity Code of Michigan Tech.
Refer to: http://www.studentaffairs.mtu.edu/dean/judicial/policies/academic_integrity.html
WebCT / Blackboard Information
The Blackboard site for CH3510 can be accessed at http://courses.mtu.edu/. Click on “MTU ISO Log In.” Enter your MTU Login ID and your MTU ISO password. In the list of courses for which you are enrolled, click on CH3510.

Within Blackboard there is a course Grade Book where you may track your grades, and a copy of this Syllabus will be available there. Periodically examine this grade book for accuracy, and please report any discrepancies to me.

University Policies: MTU ADA Statement and Affirmative Action
If you have a disability that could affect your performance in this class or that requires an accommodation under the Americans with Disabilities Act (ADA), please see me as soon as possible so that we can make appropriate arrangements. The Affirmative Action Office (http://www.admin.mtu.edu/aa/0/) has asked that you be made aware of the following:

MTU complies with all federal and state laws and regulations regarding discrimination, including the Americans with Disabilities Act of 1990. If you have a disability and need a reasonable accommodation for equal access to education or services at MTU, please call the Dean of Students Office, at 487-2212. For other concerns about discrimination, you may contact your advisor, department head or the Affirmative Action Office, at 487-3310.

Disability Services: http://www.admin.mtu.edu/urel/studenthandbook/student_services.html#disability