Course Syllabus
CH3520 – Physical Chemistry II
Department of Chemistry
Spring 2015

Instructor Information
Instructor: Kapil Adhikari, PhD
Office Location: 702 ChemSci.
E-mail: kadhikar@mtu.edu
Office Hours: MWF 1:00-2:00pm or by appointment

Course Identification
Course Number: CH3520
Course Name: Physical Chemistry II
Class Location: 0104B ChemSci
Class Times: MWF 12:05-12:55pm

Course Description/Overview
Physical Chemistry II covers fundamental theories underlying quantum chemistry, spectroscopy, and statistical mechanics.

Tentative Course Outline:

1. Quantum Mechanics
2. Atomic Structure
3. Molecular Electronic Structure
4. Spectroscopy and Photochemistry
5. Statistical Mechanics

Course Resources

Course Website(s)
- Canvas: http://courses.mtu.edu

Required Course Text
**Grading Scheme**

**Grading System**

<table>
<thead>
<tr>
<th>Letter Grade</th>
<th>Percentage</th>
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<tbody>
<tr>
<td>A</td>
<td>93% &amp; above</td>
</tr>
<tr>
<td>AB</td>
<td>87% – 92%</td>
</tr>
<tr>
<td>B</td>
<td>82% – 86%</td>
</tr>
<tr>
<td>BC</td>
<td>76% – 81%</td>
</tr>
<tr>
<td>C</td>
<td>70% – 75%</td>
</tr>
<tr>
<td>CD</td>
<td>65% – 69%</td>
</tr>
<tr>
<td>D</td>
<td>60% - 64%</td>
</tr>
<tr>
<td>F</td>
<td>59% and below</td>
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</tbody>
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**Grading Policy**

Grades will be based on the following:

<table>
<thead>
<tr>
<th></th>
<th>Percentage</th>
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</thead>
<tbody>
<tr>
<td>Homework</td>
<td>35</td>
</tr>
<tr>
<td>Mid – Term Exams (2 exams x 15 points each)</td>
<td>30</td>
</tr>
<tr>
<td>Weekly quizzes</td>
<td>15</td>
</tr>
<tr>
<td>Final Exam (Comprehensive)</td>
<td>20</td>
</tr>
<tr>
<td><strong>Total Points</strong></td>
<td><strong>100</strong></td>
</tr>
</tbody>
</table>

**Late Assignments**

Late assignments will not be considered.

**Attendance**

Class attendance is not compulsory but is *very strongly recommended*. The class starts at 12:05 pm and prompt arrival is *strongly advised. Please do not use cell phones in class. Use of laptop computers is only permitted with prior approval from the instructor and only for the purpose of taking lecture notes.*

**Course Policies**

Your grade will be based on:

- **12 online quizzes** assigned weekly via Canvas. Lowest three quizzes will be dropped at the end. Typically, the quizzes will have a time window to access and solve. The time window will generally be of 24 hours to access and not more than 20 minutes to solve. The time window may change depending on the progress of the class and difficulty level of particular quizzes.

- **Weekly homeworks** will be assigned every week and the will be due in class the same day one week after. Late assignments will be accepted up to one week after the due date. If you know an assignment will be completed late, please notify the instructor as soon as possible to make arrangements for the late submittal. If no prior arrangement is made, a deduction of 20% per day will be applied.
• **2 midterm exams** will be assigned in the form of **multiple-choice questions and problem solving**; in both cases, you will be asked both to show the development of your reasoning skills and your capabilities in solving and deriving equations to solve problems. Students who will not show up for Midterm and Final Exams without documented and satisfactory explanation will receive a grade of 0.0.

**Midterm Exams** are scheduled for:

1) Wednesday, February 18, 2015, ChemSci 104B, 12:05-12:55 pm
2) Wednesday, March 25, 2015, ChemSci 104B, 12:05-12:55 pm

• **1 comprehensive final exam**

**Final Exam** will be scheduled later on in the semester.

Laptops are allowed in class only, not during exams. The following are not allowed at any time: cell phones, Blackberries, iPods, PDAs, or any other electronic devices. Calculators on other devices are strictly prohibited during the exams. Information exchanges on electronic devices during class and exams are also prohibited and violate the Academic Integrity Code of Michigan Tech.

**University Policies**

Student work products (exams, essays, projects, etc.) may be used for purposes of university, program, or course assessment. All work used for assessment purposes will not include any individual student identification.

Academic regulations and procedures are governed by University policy. Academic dishonesty cases will be handled in accordance the University's policies.

If you have a disability that could affect your performance in this class or that requires an accommodation under the Americans with Disabilities Act, please see me as soon as possible so that we can make appropriate arrangements. The Affirmative Action Office has asked that you be made aware of the following:

*Michigan Tech 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 Michigan Tech, 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*

**Academic Integrity:**
http://www.studentaffairs.mtu.edu/dean/judicial/policies/academic_integrity.html

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

Equal Opportunity Statement: