CHEM 167 - Physical Chemistry Preparation

Modality: Remote  
Meeting Pattern: 8:30 - 9:20 am T  
Lecturer: Professor Jianing Li  
Office Hour: 10:30 - 11:20 am W

Course Description
CHEM167 provides brief reviews of essential math knowledge and skills used in Physical Chemistry. The goal of this course is to prepare students with a basic math background for Advanced Physical Chemistry (CHEM260).

Blackboard and MS Teams
We will use MS Teams for remote lectures and office hours (the meeting function) and in-class discussions (the chat function). For lectures, it will be generally better for the bandwidth if students mute the mic/video. Students can type the short questions in the chat box, or ask the long/complicated questions with the mic on. There will be NO official recording of the lectures in MS Teams. All the course materials will be available in Blackboard.

Technical support for students: Students, please read this technology check list to make sure you are ready for classes. [https://www.uvm.edu/it/kb/student-technology-resources/](https://www.uvm.edu/it/kb/student-technology-resources/)

Students should contact the Helpline (802-656-2604) for support with technical issues.

Textbooks
No required textbook.

Topics

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<tbody>
<tr>
<td>1-2</td>
<td>Review of Vectors and Coordinate Systems</td>
<td>6-8</td>
<td>Matrices and Determinants (Slater Determinant &amp; Secular Determinant)</td>
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<td>3-4</td>
<td>Review of Derivatives and Integrals</td>
<td>9-11</td>
<td>Summations and Probability</td>
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<td>5</td>
<td>Simple Differential Equations in Physical Chemistry</td>
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<td>Discussions</td>
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Note: Lecture numbers are approximate.

Grading
- Attendance and In-class Exercise (50%).
- Final Exam (50%)
Attendance Policy and Classroom Environment Expectations

The UVM attendance policy outlines expectations for attendance. Despite no tracking of attendance and participation, students will have the best learning experience when attending all the classes. Also, absence without a justified medical reason will likely result in missing of the in-class exercise (see the grading policy).

Attendance and illness/isolation/quarantine

If the student needs to isolate or quarantine, Student Health Services will inform the Dean’s office. I can then contact the dean’s office for confirmation that a student is in quarantine or isolation. We offer flexibility for these instances where possible, and the student should contact the lecturer (Prof. Li) to make arrangements to discuss missed work. Students, especially those who are asymptomatic in quarantine, are expected to continue their academic work.