Chem 393/5393 Section 1, Fall 2008
Dr. Challa V. Kumar

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Course website:  http://jasmin.chem.uconn.edu  and follow the links to the course.

Chem 393 Advanced Physical Chemistry I  
Tu, Th: 9.30 – 10.45, T215  
Office h: 3.30 to 5.30 pm Tu, Th, other times by appointment  

Course Contents  (see also the schedule)

Thermodynamics  
Concepts of pressure, temperature, internal energy, heat, work and other thermodynamic quantities. Equilibrium.

Midsem Examination – Sept 30

Quantum Mechanics  
Schroedinger equation, harmonic oscillator, rigid rotor, chemical bonding, and spectroscopy. Reaction kinetics.

Oral Presentations  - Nov 18-Dec 4
Final examination - Dec TBA

Course Responsibilities

<table>
<thead>
<tr>
<th>Task</th>
<th>Percentage of Grade</th>
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<tbody>
<tr>
<td>Oral + Written Presentation</td>
<td>20% of the grade</td>
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<tr>
<td>Assignments (4)</td>
<td>20% of the grade</td>
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<tr>
<td>Midsem Exam</td>
<td>30% of the grade</td>
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<tr>
<td>Final Exam</td>
<td>30% of the grade</td>
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Oral Presentation  
There will be oral presentations on advanced topics during the last week of classes. A written report on the assigned topic is due on the day of the presentation. This report should be 10 double spaced printed pages (including graphics, equations, and references). See the course website for instructions on the format. Topics will be assigned four weeks prior to the scheduled presentation.

Midsem and Final Examinations  
Midsem will include the material covered till the date of the examination. The final will cover the later half of the semester.

Any one wishing to take a make-up exam will have to produce a valid exemption note from a qualified Physician, explaining why the student can't take the examination on the scheduled date and time. Make-up examinations will not be given without a note.

Grading  
The final grade in the course will primarily depend upon the overall performance in the course such as participation in discussions, presentations and performance in the written examinations.