

## Chem 332: Spring 2014 Physical Chemistry II Syllabus

**Instructor:** Aurora Clark (Fulmer 119; 335-3362)

**Email:** [auclark@wsu.edu](mailto:auclark@wsu.edu)

**Class hours:** MWF 9:10-10 Todd Hall Rm. 304      **Office Hours:** W 10-12am Ful 119

**Text:** *Quantum Chemistry and Molecular Interactions*, by Andrew Cooksy

**Course Goals:** The goals of this course are to provide a fundamental understanding of quantum mechanics from its inception at the turn of the 20<sup>th</sup> century until the mid 20<sup>th</sup> century, however emphasizing modern applications of quantum mechanics in current technologies and day-to-day life.

**Expected Learning Outcomes:** At the end of this course you will be able to demonstrate the fundamental mathematical skills and knowledge of physics to construct wave function representations of a variety of systems, as well as to define the Hamiltonian for a variety of systems and solve simple Schrodinger equations, and demonstrate the essential approximations needed to solve the Schrodinger equation for many electron and molecular systems.

All course information (grades and other info) can be found on the course website on [angel.wsu.edu](http://angel.wsu.edu)

### Class Schedule:

M – F	1/13 – 1/17	Ch. 1 Classical to QM	HW #1 assigned
W – F	1/22 – 1/24	Ch. 2 SE	HW #1 due 1/22, HW#2 assigned
M – F	1/27 – 1/31	Ch. 2	HW#2 due 1/29, HW#3 assigned
M – F	2/3 – 2/7	Ch. 3	HW #3 due 2/5, HW#4 assigned
M – W	2/10 – 2/12	Ch. 3	HW#4 due 2/14
F	2/14	Midterm #	HW#5 assigned
M – F	2/17 – 2/21	Ch. 4	
M – F	2/24 – 2/28	Ch.4	HW #5 due 2/26, HW #6 assigned
M – F	3/3 – 3/7	Ch. 5	HW #6 due 3/5, HW#7 assigned
M – W	3/10 – 3/12	Ch. 6	HW #7 due 3/14
F	3/14	Midterm #2	HW#8 assigned
M – F	3/17 – 3/21	Spring break	
M – F	3/24 – 3/28	Ch. 6	HW #8 due 3/28, HW #9 assigned
M – F	3/31 – 4/4	Ch. 7	HW#9 due 4/4, HW#10 assigned
M – F	4/7 – 4/11	Ch. 7	HW#10 due 4/11, HW#11 assigned
M – F	4/14 – 4/18	Ch. 8	HW #11 due 4/18
M	4/21	Midterm #3	HW#12 assigned
W – F	4/21 – 4/25	End Ch. 8 beg. 9	

M – F	4/28 – 5/2	Ch. 9	HW #12 due 5/2
		Final Exam	TBA

*Note on HW assignments: late HW's will not be accepted, show ALL work.*

**Performance Criterion and Grades:**

3 Midterms @100	300
Homeworks scaled to 150	150
<u>Final Exam</u>	<u>150</u>
Total	600

90 – 100	A
80 – 89	B
70 – 79	C
60 – 69	D
< 60	F

**Students with Disabilities:** *Reasonable accommodations are available for students with a documented disability. If you have a disability and need accommodations to fully participate in this class, please either visit or call the Access Center (Washington Building 217; 509-335-3417) to schedule an appointment with an Access Advisor. All accommodations MUST be approved through the Access Center.*

**Academic dishonesty** or cheating of any kind in the course (including plagiarism) will not be tolerated. Anyone caught cheating will be given a grade of F for the entire course. A letter documenting the incident will be written to the Dean of the College and the Vice President for Student Affairs.

**Emergency Plan.** *In support of our commitment to the safety of students, WSU has developed The Campus Safety Plan, which can be found at <http://safetyplan.wsu.edu>. You can also access university emergency management web site at <http://oem.wsu.edu/emergencies> to become familiar with campus safety and emergency information.*