

# Course Description

## Quantum Chemistry

Professor:	Dr. Stefan Franzen
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Course goals:	To present an introduction to essentials of quantum chemistry and to outline the general physical principles that form the basic framework for chemists with applications to other branches of chemistry ranging from biochemistry and engineering. The focus of the course will be specifically for students in a program of Biomolecular and Chemical Engineering. The course emphasis will be on basic quantum mechanical problem solving and on scientific writing. However, significant time will be given to molecular structure and spectroscopy.
Textbook:	“Physical Chemistry”, by Atkins and DePaula, 8 <sup>th</sup> Edition, Oxford University Press
Additional Reading:	Quantum Chemistry: Theory and Applications, by Stefan Franzen
Problem sets:	Problem sets will be assigned in class on a regular basis. Problem sets should be turned in after one week they are assigned. Please staple sheets in order with name, date, and assignment identification clearly printed in the upper right corner of the cover page.
Incomplete grades and late assignments:	If a student is granted with a reasonable documented excused absence according to the University policy, then the grades for the missed assignment(s) will be determined as follows: either an alternative (make-up) exam or assignment will be given and/or the total maximum of the points for the student will be decreased by the points corresponding to the missed assignment(s) and the new (decreased) number of the maximum points be used to renormalize the number of the points earned. If no reasonable excuses are given the student will not be credited with any points for the missed assignment and the total maximum number of points will not be re-normalized. <b>Excuses for any anticipated exam absence</b> must be presented no later than <b>one week</b> prior to the exam. The only exception to this policy is for documented medical emergencies.
Recitation:	Please plan to attend the problem set on Friday afternoon where detailed solutions to the quantitative problems will be discussed.
Academic integrity:	All exams and quizzes are expected to be completed in accordance with the Code of Student Conduct adopted by the University.
Students with disabilities:	Students with disabilities will be accommodated according to the University policy.
Other policies:	Talking is prohibited during lectures. Excessive shuffling while lecture is in progress is distracting for everyone. <b>For problem sets and discussions we encourage you to work in groups.</b> Test yourself using practice exams without the help of fellow students. Make sure you can work the problems on your own before the exam..