CHEMISTRY 521

GRADUATE PHYSICAL CHEMISTRY

Fall Term, 1999

INSTRUCTOR INFORMATION

Instructor: Dr. Gary L. Findley
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COURSE

Content: A review of selected topics in Physical Chemistry.

Goals/
Objectives: Introduction to quantum mechanics. Topics covered include: introduction to Hilbert space and operator algebras, model systems (barrier problems, harmonic oscillator), angular momentum, one-electron problem, many-electron problem, variational method, perturbation theory, Hartree-Fock theory, electronic structure, and molecular symmetry.

REQUIREMENTS

Prerequisites: CHEM 402 (second semester of undergraduate Physical Chemistry) or equivalent.

Text: *Quantum Chemistry*, Ira N. Levine, 4th ed. (Prentice-Hall, Englewood Cliffs, NJ, 1991).

Material
Covered: Chapters 1 - 15.

Attendance: It is your responsibility to attend class and to be punctual. Unexcused absences and/or habitual tardiness will result in a grade penalty, in accord with the ULM Code of Student Conduct.

EVALUATION

Exams: There will be two take-home examinations, each worth 100 points. (Since these are take-home exams, there will be no provision made for make-up exams.)

Homework: Homework assignments will be given for a total of 100 points. Late homework will not be accepted.

Grading:

exams	200 pts
homework	100 pts
COURSE TOTAL	300 pts

A	269 - 300 pts
B	239 - 268
C	209 - 238
D	179- 208
F	< 179