课程代码（Coursenumber）  
Chemistry 7650 (765)  
  
课程对象（Audience）  
Primarily for Graduates  
  
开课教师（Teacher）  
Professor Carpenter  
  
学期（Semester）  
Fall  
  
课程描述（Description）  
课程提纲（Syllabus）  
1 Fri 8/28 Introduction  
2 Mon 8/31 Statistical Analysis  
3 Wed 9/2 Additivity Schemes  
4 Fri 9/4 Additivity Schemes  
5 Mon 9/7 Problem Set #1 Discussion  
6 Wed 9/9 Molecular Mechanics  
7 Fri 9/11 Molecular Mechanics  
8 Mon 9/14 Molecular Mechanics  
9 Wed 9/16 Problem Set #2 Discussion  
10 Fri 9/18 Classical vs Quantum Mechanics  
11 Mon 9/21 The Schrodinger Equation  
12 Wed 9/23 Solving the Schrodinger Equation  
12 Fri 9/25 Solving the Schrodinger Equation  
14 Mon 9/28 Problem Set # 3 Discussion  
15 Wed 9/30 Basic Ab Initio Methods  
16 Fri 10/2 Basic Ab Initio Methods  
17 Mon 10/5 Beyond Hartree Fock  
18 Wed 10/7 Problem Set #4 Discussion  
19 Fri 10/9 Density Functional Theory  
Mon 10/12 Fall Break – No Class  
20 Wed 10/14 Density Functional Theory  
21 Fri 10/16 Problem Set # 5 Discussion  
22 Mon 10/19 Statistical Thermodynamics  
23 Wed 10/21 Statistical Thermodynamics  
24 Fri 10/23 High-Accuracy Models  
25 Mon 10/26 Problem Set # 6 Discussion  
26 Wed 10/28 Spectroscopy  
27 Fri 10/30 Spectroscopy  
28 Mon 11/2 Spectroscopy  
29 Wed 11/4 Spectroscopy  
30 Fri 11/6 Problem Set # 7 Discussion  
31 Mon 11/9 Solvation/Oniom  
32 Wed 11/11 Transition States/ BSSE  
33 Fri 11/13 Problem Set # 8 Discussion  
34 Mon 11/16 The Alphabet Soup  
35 Wed 11/18 The Alphabet Soup  
36 Fri 11/20 The Alphabet Soup  
37 Mon 11/23 Problem Set # 9 Discussion  
Wed 11/25 Thanksgiving recess  
Fri 11/27 Thanksgiving recess  
38 Mon 11/30 Huckel Revisited  
39 Wed 12/2 Huckel Revisited  
40 Fri 12/4 Huckel Revisited  
  
课时信息（Totalhours）  
  
教参信息（Textbookinfo）  
1 Chemistry: Concepts and Problems: A Self-Teaching Guide (Wiley Self-Teaching Guides) by Clifford C. Houk and Richard Post (Paperback - Feb 1996)   
ISBN-13: 978-0471121206   
2. Chemistry by Steven S. Zumdahl and Susan A. Zumdahl (Hardcover - Dec 3, 2008)   
ISBN-13: 978-0547125329  
世界各地拥有馆藏的图书馆（OCLC）:55  
3.Chemistry for Dummies by John T. Moore (Paperback - Nov 2002)   
ISBN-13: 978-0764554308  
世界各地拥有馆藏的图书馆（OCLC）:1240  
4.Homework Helpers: Chemistry by Greg Curran (Paperback - Mar 2004) ISBN-13: 978-1564147219   
世界各地拥有馆藏的图书馆（OCLC）:19  
5.Chemistry: The Central Science (11th Edition) by Theodore E. Brown, H. Eugene LeMay, Bruce E. Bursten, and Catherine Murphy (Hardcover - Jan 8, 2008)   
ISBN-13: 978-0136006176   
世界各地拥有馆藏的图书馆（OCLC）:164  
6.The Cartoon Guide to Chemistry (Cartoon Guide To...) by Larry Gonick and Craig Criddle (Paperback - May 3, 2005)  
ISBN-13: 978-0060936778   
世界各地拥有馆藏的图书馆（OCLC）:1143  
7.General Chemistry by Linus Pauling (Paperback - Apr 1, 1988)   
ISBN-13: 978-0486656229   
8.The Complete Idiot's Guide to Chemistry, 2nd Edition by Ian Guch (Paperback - Jun 27, 2006)   
ISBN-13: 978-1592575145   
世界各地拥有馆藏的图书馆（OCLC）:526  
9.Chemistry: An Introduction to General, Organic, & Biological Chemistry (10th Edition) by Karen Timberlake (Hardcover - Feb 18, 2008)   
ISBN-13: 978-0136019701   
世界各地拥有馆藏的图书馆（OCLC）:113  
10.Chemistry by Steven S. Zumdahl and Susan A. Zumdahl (Hardcover - Jan 9, 2006)   
ISBN-13: 978-0618528448   
世界各地拥有馆藏的图书馆（OCLC）:65