课程名（Coursename）  
CHEM 31X. Chemical Principles  
  
课程代码（Coursenumber）  
CHEM 31X  
  
课程对象（Audience）  
Primarily for Undergraduates  
  
开课教师（Teacher）  
Moerner, W.; Waymouth, R.  
  
学期（Semester）  
Terms: Aut  
  
课程描述（Description））  
Accelerated; for students with substantial chemistry background. Chemical equilibria concepts, equilibrium constants, acids and bases, chemical thermodynamics, quantum concepts, models of ionic and covalent bonding, atomic and molecular orbital theory, periodicity, and bonding properties of matter. Recitation. Prerequisites: AP chemistry score of 5 or passing score on chemistry placement test. Recommended: high school physics.  
  
课时信息（Totalhours）  
  
Units: 4  
教参信息（Textbookinfo）  
\*Chemistry  Special Order  Author:Spencer Edition:4th  
1 Chemical Principles: The Quest for Insight by Peter Atkins and Loretta Jones (Hardcover - Aug. 1, 2007)  
ISBN-13: 978-1429209656  
世界各地拥有馆藏的图书馆（OCLC）:5  
2 Chemical Principles with OWL, Enhanced Edition by Steven S. Zumdahl (Hardcover - May 21, 2010)  
ISBN-13: 978-1111425869  
世界各地拥有馆藏的图书馆（OCLC）:2  
3 Chemical Principles & Study Guide/Solutions Manual by Peter Atkins and John Krenos (Hardcover - May 4, 2007)  
ISBN-13: 978-1429212595   
世界各地拥有馆藏的图书馆（OCLC）:2  
4 Chemical Principles by Peter Atkins and Loretta Jones (Hardcover - Dec. 11, 2009)  
ISBN-13: 978-1429219556  
世界各地拥有馆藏的图书馆（OCLC）:34  
5 Study Guide for Zumdahl's Chemical Principles by Steven S. Zumdahl (Paperback - Jan. 22, 2008)  
ISBN-13: 978-0618946587   
世界各地拥有馆藏的图书馆（OCLC）:8  
6 Student Solutions Manual for Zumdahl's Chemical Principles by Steven S. Zumdahl (Paperback - Dec. 7, 2007)  
ISBN-13: 978-0618953363  
世界各地拥有馆藏的图书馆（OCLC）:5  
7 Introduction to Chemical Principles (10th Edition) by H. Stephen Stoker (Paperback - Jan. 14, 2010)  
ISBN-13: 978-0321666048   
世界各地拥有馆藏的图书馆（OCLC）:17  
8 Chemical Principles Student's Study Guide & Solutions Manual by John Krenos, Joseph Potenza, Lynn Koplitz, and Thomas Spence (Paperback - Mar. 19, 2004)  
ISBN-13: 978-0716707400  
世界各地拥有馆藏的图书馆（OCLC）:13  
9 Elementary Principles of Chemical Processes by Richard M. Felder and Ronald W. Rousseau (Hardcover - Dec. 15, 2004)  
ISBN-13: 978-0471687573  
世界各地拥有馆藏的图书馆（OCLC）:93  
10 Elementary Principles of Chemical Processes, 3rd Edition 2005 Edition Integrated Media and Study Tools, with Student Workbook by Richard M. Felder and Ronald W. Rousseau (Hardcover - Feb. 2, 2005)  
ISBN-13: 978-0471720638  
11 Basic Principles and Calculations in Chemical Engineering (7th Edition) by David M. Himmelblau and James B. Riggs (Hardcover - Dec. 18, 2003)  
ISBN-13: 978-0131406346  
世界各地拥有馆藏的图书馆（OCLC）:118