课程名（Coursename）  
Chemistry 217. Modern Applications of Analytical Techniques to Chemical and Biological Sciences   
课程代码（Coursenumber）  
1061  
  
课程对象（Audience）  
Primarily for Graduates  
  
开课教师（Teacher）  
Andrew Norman Tyler  
  
学期（Semester）  
Spring term  
  
课程描述（Description））  
The goal of this course is to introduce students to analytical techniques that enable the characterization and study of molecules. While emphasis will be placed on the application of mass spectrometry to small molecules, other techniques, such as nuclear magnetic resonance (NMR) spectroscopy will be discussed, as well as the important application of chromatography in conjunction with these techniques. The course will also discuss the study of biomolecules and should prove useful for both pure chemists and chemical biologists.  
  
课时信息（Totalhours）  
Tu., Th., 1–2:30. EXAM GROUP: 15, 16  
  
教参信息（Textbookinfo）  
1 Infrared Spectroscopy: Fundamentals and Applications (Analytical Techniques in the Sciences (AnTs) \*) - Paperback (Aug. 16, 2004) by Barbara H. Stuart  
ISBN-13: 978-0470854280  
世界各地拥有馆藏的图书馆（OCLC）:264  
2 Applications of Analytical Techniques to the Characterization of Materials - Hardcover (Mar. 31, 1992) by D.L. Perry  
ISBN-13: 978-0306441899  
3 Fast Analytical Techniques for Electrical & Electronic Circuits - Hardcover (June 15, 2002) by Vatché Vorpérian  
ISBN-13: 978-0521624428  
4 Quantitative Equity Portfolio Management: Modern Techniques and Applications (Chapman & Hall/CRC Financial Mathematics Series) - Hardcover (May 11, 2007) by Edward E. Qian, Ronald H. Hua, and Eric H. Sorensen  
ISBN-13: 978-1584885580  
世界各地拥有馆藏的图书馆（OCLC）:78  
5 Multi-scale Quantum Models for Biocatalysis: Modern Techniques and Applications (Challenges and Advances in Computational Chemistry and Physics) - Hardcover (June 30, 2009) by Darrin M. York and Tai-Sung Lee  
ISBN-13: 978-1402099557  
世界各地拥有馆藏的图书馆（OCLC）:16  
6 Liquid Chromatography/Mass Spectrometry: Techniques and Applications (Modern Analytical Chemistry) - Hardcover (Jan. 31, 1990) by Alfred L. Yergey, Charles G. Edmonds, Ivor A.S. Lewis, and Marvin L. Vestal  
ISBN-13: 978-0306431869  
7 Application of Modern Analytical Techniques to Ensure Seafood Safety And Authenticity: Fao Fisheries Technical Paper - Paperback (July 7, 2005) by Martinez Iciar, James David, and Loreal Henri  
ISBN-13: 978-9251052938  
世界各地拥有馆藏的图书馆（OCLC）:65  
8 Modern Analytical Techniques for M Part1 (Techniques of Metals Research) - Hardcover (July 1970) by BUNSHAH and R.F. Bunshah  
ISBN-13: 978-0471122159  
9 Water Quality Measurement: Volume 1: The Modern Analytical Techniques (Pollution Engineering & Technology Series) - Hardcover (Aug. 1, 1981) by H.B. Mark and J. Mattson  
ISBN-13: 978-0824713348  
10 Environmental Chemometrics: Principles and Modern Applications (Analytical Chemistry) - Paperback (Nov. 21, 2008) by Grady Hanrahan  
ISBN-13: 978-1420067965  
世界各地拥有馆藏的图书馆（OCLC）:146  
11 Mass Spectrometry: Clinical and Biomedical Applications Volume 2 (Modern Analytical Chemistry) - Hardcover (Jan. 31, 1994) by Dominic M. Desiderio  
ISBN-13: 978-0306444555