课程名（Coursename）  
Total Synthesis  
  
课程代码（Coursenumber）  
L8  
  
课程对象（Audience）  
Graduates  
  
开课教师（Teacher）  
Prof. S. V. Ley  
  
学期（Semester）  
  
课程描述（Description）  
Topics Introduction.  
The power of ring forming reactions.  
Symmetry based design.  
Latent and masked functionality.  
Intramolecularisation and tethering concept.  
Tandem and consecutive processes.  
Multicomponent reactions.  
Iterative reaction concept.  
Parallel synthesis and combinatorial chemistry.  
Supramolecular assembly methods.  
Biological methods in synthesis.  
Biomimetic synthesis planning.  
  
课时信息（Totalhours）  
  
教参信息（Textbookinfo）  
1 Modern Organic Synthesis in the Laboratory by Jie Jack Li, Chris Limberakis, and Derek A. Pflum (Paperback - Sept. 10, 2007)  
ISBN-13: 978-0195187991  
世界各地拥有馆藏的图书馆（OCLC）:332  
2 Small Scale Synthesis: A Laboratory Text of Organic Chemistry by Murray Zanger, James McKee, and Murray Zanger (Spiral-bound - May 31, 2002)  
ISBN-13: 978-0072846034  
世界各地拥有馆藏的图书馆（OCLC）:7  
3 Student Lab Companion: Laboratory Techniques for Organic Chemistry (2nd Edition) by John W. Lehman (Paperback - Jan. 25, 2008)  
ISBN-13: 978-0131593817  
世界各地拥有馆藏的图书馆（OCLC）:37  
4 Multiscale Operational Organic Chemistry: A Problem-Solving Approach to the Laboratory Course by John W. Lehman (Hardcover - Aug. 30, 2001)  
ISBN-13: 978-0130154958  
世界各地拥有馆藏的图书馆（OCLC）:58  
5 Microarrays: Volume I: Synthesis Methods (Methods in Molecular Biology) (v. 1) by Jang B. Rampal (Hardcover - July 27, 2007)  
ISBN-13: 978-1588295897  
世界各地拥有馆藏的图书馆（OCLC）:139   
6 Reactions and Syntheses: In the Organic Chemistry Laboratory by Lutz F. Tietze, Theophil Eicher, Ulf Diederichsen, and Andreas Speicher (Paperback - Nov. 16, 2007)  
ISBN-13: 978-3527312238  
世界各地拥有馆藏的图书馆（OCLC）:153  
7 Structural Analysis and Synthesis: A Laboratory Course in Structural Geology by Stehen M. Rowland, Ernest M. Duebendorfer, and Ilsa M. Schiefelbein (Spiral-bound - Jan. 22, 2007)  
ISBN-13: 978-1405116527  
世界各地拥有馆藏的图书馆（OCLC）:91  
8 Microscale Operational Organic Chemistry: A Problem-Solving Approach to the Laboratory Course by John W. Lehman (Paperback - May 30, 2003)  
ISBN-13: 978-0130335180  
世界各地拥有馆藏的图书馆（OCLC）:57  
9 Science of Synthesis: Houben-Weyl Methods of Molecular Transformations Category 6: Compounds with All-Carbon Functions, Volume 48: Alkanes by D. Bellus (Hardcover - Oct. 23, 2009)  
ISBN-13: 978-3131190215  
世界各地拥有馆藏的图书馆（OCLC）:92  
10 RNA Methodologies, Fourth Edition: Laboratory Guide for Isolation and Characterization by Robert E. Farrell Jr. (Spiral-bound - Oct. 8, 2009)  
ISBN-13: 978-0123747273  
世界各地拥有馆藏的图书馆（OCLC）:38