课程名（Coursename）

Chemistry 27. Organic Chemistry of Life

课程代码（Coursenumber）

5978

课程对象（Audience）

Primarily for Undergraduates

开课教师（Teacher）

George M. Whitesides

学期（Semester）

Spring term

课程描述（Description））

Chemical principles that govern the processes driving living systems are illustrated with examples drawn from biochemistry, cell biology, and medicine. The course deals with organic chemical reactivity (reaction mechanisms, structure-reactivity relationships), with matters specifically relevant to the life sciences (chemistry of proteins, nucleic acids, drugs, natural products, cofactors, signal transduction), and with applications of chemical biology to medicine and biotechnology. An understanding of organic reactions and their "arrow" pushing mechanisms is required.

课时信息（Totalhours）

M., W. , 2:30-4, and a discussion section, and a five-hour laboratory each week to be arranged. EXAM GROUP: 7, 8

教参信息（Textbookinfo）

1 General, Organic, and Biological Chemistry: An Integrated Approach by Laura D. Frost, S. Todd Deal, and Karen C. Timberlake (Hardcover - Jan. 15, 2010)

ISBN-13: 978-0805381788

世界各地拥有馆藏的图书馆（OCLC）: 16

2 General, Organic, and Biological Chemistry by Janice G. Smith (Hardcover - Jan. 2010)

ISBN-13: 978-0073026572

世界各地拥有馆藏的图书馆（OCLC）:30

3 Book a la Carte for General, Organic, and Biological Chemistry: Structures of Life (3rd Edition) by Karen C. Timberlake (Loose Leaf - July 17, 2009)

ISBN-13: 978-0321668059

4 Fundamentals of General, Organic, and Biological Chemistry (6th Edition) by John McMurry, David S. Ballantine, Carl A. Hoeger, and Virginia E. Peterson (Hardcover - Feb. 16, 2009)

ISBN-13: 978-0136054504

世界各地拥有馆藏的图书馆（OCLC）:64

5 Study Guide and Partial Solutions Manual for Chemistry and Life: An Introduction to General, Organic and Biological Chemistry by Marvin Hackert (Paperback - Oct. 6, 2000)

ISBN-13: 978-0130853851

6 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）:107

7 Chemistry: An Introduction to General, Organic, and Biological Chemistry by Karen Timberlake (Hardcover - Jan. 31, 2009)

ISBN-13: 978-0321566935

世界各地拥有馆藏的图书馆（OCLC）:1

8 General, Organic, and Biochemistry: Connecting Chemistry to Your Life by Ira Blei and George Odian (Hardcover - Dec. 9, 2005)

ISBN-13: 978-0716743750

世界各地拥有馆藏的图书馆（OCLC）:71

9 General, Organic, and Biological Chemistry by H. Stephen Stoker (Hardcover - Dec. 15, 2008)

ISBN-13: 978-0547152813

世界各地拥有馆藏的图书馆（OCLC）:23

10 General Organic and Biological Chemistry by Kenneth William Raymond (Hardcover - Dec. 14, 2009)

ISBN-13: 978-0470504765

世界各地拥有馆藏的图书馆（OCLC）:22

11 Organic Structure Determination Using 2-D NMR Spectroscopy: A Problem-Based Approach (Advanced Organic Chemistry) by Jeffrey H. Simpson (Paperback - July 24, 2008)

ISBN-13: 978-0120885220

世界各地拥有馆藏的图书馆（OCLC）:327