

The University of Kansas, Fall 2017

Chemistry 760: Introduction to Chemistry in Biology

MWF 12:00 pm - 12:50 pm, Malott Hall, Room 3059

Instructor

Minae (Minnie) Mure

6079 Malott, 4-2901

mmure@ku.edu

Office Hours

by Appointment through e-mail

Course Description

Chemical biology is multidisciplinary science where the knowledge of chemistry is applied to solve biological problems at the molecular level, and biological systems are evolved to gain new functions. This course aims to establish an opportunity for graduate students to study current research at the interface of biology and chemistry. This course will be a comprehensive introduction to the field of chemical biology covering fundamentals and basic techniques that are used to study biological macromolecules. Reviews of recent literature will be given as a case study of each technique.

Prerequisites

Prerequisites of Biochemistry or Biology are not necessary.

Textbooks

No formal textbook is required. The references below are strongly recommended reading materials for the course. I will ask the library to order the books w/o call numbers listed. The remainder of books will be on reserve at Anschutz Science Library.

Author	Title	Edition	Mfdh call number
Silverman, R.B.	The Organic Chemistry of Enzyme-Catalyzed Reactions	2nd	QP601 .S55 2000.
Bugg, T.	An Introduction of Enzyme and Coenzyme Chemistry	2nd	QP601.B955 2004
Fersht, A.	Structure and Mechanism in Protein Science	3rd	QD431.25.S85 F47 1999
Dugas, H.	Bioorganic Chemistry	3rd	QP601. D78. 1996
Kyte, J.	Mechanism in Protein Chemistry	1st	QD431. K97. 1995
Nelson, D.L. & Cox, M.M.	Lehninger Principles of Biochemistry	4th	
Voet, D., Voet, J.,	Biochemistry	3rd	QP514.2.V64 2004b

Evaluation

1. Classroom participation – discussion (10 %)
2. Midterm (40 %) & Final exam (50 %): These are take home exams. Topics and the due date will be provided in the class.

A letter grade will be given. Grades will be curved based on the highest score of the class.

A (above 90%), B (80%-89%), C (70%-79%), D(60%-69%), F(below 59%)

Course Policy

1. Your attendance in the scheduled lectures and assigned seminars is required.
2. You must inform the instructor in advance of missing classes & seminars, or missing deadlines for assignments. Only extenuating circumstances (e.g. family emergency, illness, attending conferences) will allow for make-up assignments to be given by the instructor.
3. The preferred method for taking notes in class is with pen and paper, however, I do not prohibit laptop and tablet usage for taking notes. Using laptops and tablets for activities unrelated to the class, such as web browsing, email, twitter, facebook, games, and etc. are strictly prohibited. This applies equally to use of cell phones, smart phones, PDAs, and other hand-held devices. If I notice someone violating this rule, he/she will lose the usage of the device for the class period. Repeated offenders will lose the usage of the device for the period of the semester.
4. Academic misconduct listed under (http://www.writing.ku.edu/~writing/instructors/guides/academic_misconduct.shtml) will be reported to the department and consequences will be given.
5. KU Weapon policy (effective on July 1, 2017) <http://policy.ku.edu/university-kansas-policy-weapons-including-firearms-effective-july-1-2017>