

Course syllabus will provide a general plan for the course; deviations may be necessary.

Survey of Chemistry II 1152K Lecture

Summer 2014

PLEASE READ CAREFULLY BEFORE THE FIRST DAY OF CLASS!!

**MWF from 12:00-1:40 pm at Langdale Hall 429
(06/09-08/02) Lab will begin on 6/17-7/24**

Instructor:

Dr. Sudeshna Sawoo

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Email is the best way to communicate with the instructor. While sending an email, write the name of the course and then the subject. For example if you want to write about arranging an appointment, the subject should be “1152 summer- appointment”. Please send email from gsu email. (Also email through desire2learn will be answered)

Office hours:

Monday, Wednesday and Friday from 10:00-11:30 am; walk-in or by appointment.

Please email for additional office hours on Friday from 2:00-4:00 pm.

Brief course description: The prerequisite for the course is Chemistry 1151K lecture and lab. This 1152K course will cover important principles in organic chemistry and biochemistry. This course includes two parts, lecture (75% in grade) and lab (25% in grade).

Textbook:

1. Karen C. Timberlake (PEARSON)

“General, Organic and Biological Chemistry” 4th Edition

ISBN-13: 978-0-321-75089-1

ISBN-10: 0-321-75089-6

***The access code of using the ‘mastering chemistry’ for your textbook should come along with the textbook or you may purchase it separately from PEARSON. The ‘mastering chemistry’ coursework information will be provided on the first day of class.**

***If you have taken 1152 before or got some other textbook covering the same course topics for 1152, you are allowed to use whatever you have. Please contact your instructor for any question regarding textbook and ‘mastering chemistry’.**

Lab manual: Chemistry 1152K/1102K Laboratory Manual for Students. The book will be available when you attend the first-pre-lab lecture and check in.

Preparation for the course:

- 1) **Read** the assigned material *before* it is covered in lecture,
- 2) **Work** through the **example** and **practice problems** from the textbook within each assigned chapter or those placed in Desire2learn
- 3) **Do your home works regularly**
- 4) **Work** a large number and wide variety of problems “as many **end-of-chapter problems as possible**”. All in-chapter examples and practice exercises should be done as some of the problems could be placed in quizzes and exams
- 5) **Mastering Chemistry informations will be provided in first day of class**
- 6) **Chapters to be covered: 11 – 24 in your text book**

Course Schedule: (THIS IS A GENERAL PLAN FOR THE COURSE; DEVIATIONS MAY SOMETIMES BE NECESSARY) Attendance will be recorded regularly!!!

Date	Topic
Before you come to class	Review some topics listed from 1151 which would help: Drawing Lewis structure, VSEPR theory, Predict the shapes and bond angles for small molecules
6/9	Chapter 11: Orientation-Alkanes, cycloalkanes Structural isomerism
6/11	Chapter 11-12: Functional groups, Alkenes, cycloalkenes (Make flash cards on Functional Groups)
6/13	Chapter 12: Alkynes and Aromatic compounds (Make flash cards on common aromatic compounds)
6/16	Quiz1 (10 points, 10 min, Chapter 11-12) Chapter 13: Alcohols
6/18	Chapter 13: Phenols, ethers, thiols, sulfides, disulfides
6/20	Exam -1 on Chapter 11, 12 and 13: 65 points, 50 mins, Chapter 18: Amines
6/23	Chapter 14: Aldehydes, ketones
6/25	Quiz 2 (10 points, 10 min, Chapter 18: Amines) Chapter 16: Carboxylic Acids
6/27	Continue Chapter 16, 18: Esters and Amides

6/30	Chapter 15: Carbohydrates & stereoisomerism, (introduction to handedness and chirality)
7/2	Exam -2 on Chapter 14,16, 18: 65 points, 50 mins Review of topics for preparation of ACS exam organic subset
7/4	4 th of July holiday, No class!!! (start making flash cards on different topics on carbohydrates, topics will be posted in D2L)
7/7	ACS exam on Organic Chemistry Part (cumulative) 100 points, 60 questions, 55 mins Last day to withdraw and receive a “W”
7/9	Chapter 15: Carbohydrates
7/10	Chapter 17: Lipids (make flash cards on Lipids)
7/14	Quiz 3 (10 points, 10 min, Chapter 15) Chapter 17: Lipids, Cholesterol, membrane structure, transport across cell membrane.
7/16	Chapter 19: Amino acids and proteins (make flash cards on amino acids and proteins)
7/18	Chapter 20: Enzymes and Vitamins
7/21	Exam -3: on Chapter 15,17, 19: 65 points, 50 mins Chapter 21: DNA, RNA (make flash cards on DNA, RNA)
7/23	Chapter 21: DNA, RNA protein synthesis
7/25	Chapter 22: Metabolism introduction, glucose metabolism, TCA cycle (make flash cards on metabolism)
7/28	Quiz 4 (10 points, 10 min, Chapter 20, 21) Chapter 23, 24: Electron transport chain and ATP synthesis “oxidative phosphorylation”, beta-oxidation of Fatty acid
7/30	Exam -4: on Chapter 20, 21, 22, 23: 65 points, 50 mins Review topics for Final ACS exam on Bio-Chem subset
8/1 (Final Exam)	ACS exam from 10:45 AM, 100 points 60 questions for 55 min

Academic misconduct: Any form of academic misconduct, such as cheating, using mobile phones, watching classmate’s test paper or discussion with classmate is not allowed during examination and answering quizzes. The behavior will result in grade of zero for the test and final grade.

Disability services statement: It is the policy of GSU to accommodate students with disabilities, pursuant to federal law, state law and the University’s commitment to equal educational access. Any student with a disability, who needs accommodations for tests, should inform me at the beginning of the course.

How to learn chemistry 1152K:

1. Preview each chapter before lecture, and keep up with the materials posted in D2L.
2. Feel free to ask questions if it is not clear to you.
3. No way other than hard work and study to be successful in this course.
4. Bring your concentration to the classroom, and take notes and stay awake in the class time.
5. **Take notes, highlight portions, make flash cards to remember topics.**
6. Students need to **show their GSU Panther ID card when taking any test/exam.**
7. **Scantrons for Major Exams:** A total of 4 scantrons form (green) will be needed for this course. They can be purchased from the GSU bookstore. Scantrons for ACS exams will be provided by the instructor.
10. **Each student has the responsibility of checking their email and Desire2Learn and Mastering Chemistry in a daily basis. The late homework will not be graded.**

Grades Cut Off:

A+: 96 % A: 90%; A-: 87%; B+: 84% B: 80% B-: 77%, C+: 74% C: 70% C-: 67%, etc.

Course points are calculated as follows:

Maximum Number of Points

Home works, quizzes, attendance, D2L use 100

4 Major Exams (**75 points each**) 300

Laboratory (includes lab final exam) 200

Final ACS Examination (**Organic chemistry**) 100

Final ACS Examination (**Biochemistry**) 100

Total Possible Points 800

Letter Grade is from the $\% = (\text{total number of points accumulated} / 800) \times 100$