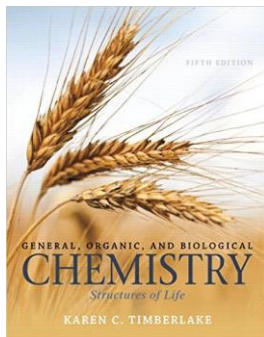


Georgia State University
1151K Survey of Chemistry I
Course Syllabus, Fall 2017

Text: General, Organic, and Biological Chemistry: Structures of Life 5th Edition ***
by [Karen C. Timberlake](#) (Author). 4-th Edition is acceptable
ISBN-13: 978-0321967466
ISBN-10: 0321967461



Instructor: Dr. Elina Stroeva

Email: estroeva@gsu.edu

Send email from your GSU email account only, and mention the course in the subject

Office phone: (404) 413-5899

Office: Courtland North, 214

Lecture Time: M, W 9:30 – 10:45 am

Lecture Room: Langdale Hall 600

Office Hours: for students convenience office hours will be set up during the first week of classes

Note regarding office hours: if you come to office hours, please, bring your book, your lecture notes and your attempt at the homework

Course Description:

This is the first course in a two-semester sequence covering the survey of chemistry and applications of chemistry for science and non-science majors. Chapters to be covered: 1-11.

Important Dates:

August 21	Classes begin (no laboratories during this week Aug 21-27)
September 04	Holiday Labor Day
August 28	First day of laboratory sessions
October 10	Semester midpoint, last day to withdraw with a “W”
November 20-25	Thanksgiving Break
December 04	Last day of classes
December 06	Final exam (8:00 -10:30 AM)

Course Requirements:

- 1) A **scientific non-programmable calculator** is required. An example of an acceptable calculator is the Texas Instruments TI-30XA.

- 2) Text: Chemistry: General, Organic, and Biological Chemistry: Structures of Life by [Karen C. Timberlake](#) (Author). Any addition is acceptable
- 3) **i>clicker (i>clicker or i>clicker2)**

Check iCollege and your GSU email Every Day!

Learning outcomes: The goals of this course are set forth by the chemistry department.

- 1) The student should demonstrate a general knowledge of the chemical concepts covered.
- 2) The student should demonstrate the ability to successfully apply math skills to chemical systems.
- 3) The student should demonstrate the ability to apply chemical principles to problems in physics, biology and medicine.

Learning objectives:

- 1) Scientific method
- 2) Measurements, significant figures, and conversion factors
- 3) Classification of matter. Energy
- 4) Structure of atom. Orbitals.
- 5) Elements and Symbols.
- 6) Nuclear Chemistry Concepts
- 7) Periodic Table. Trends in Periodic Table
- 8) Chemical bond. Types of chemical bond. Nomenclature.
- 9) Chemical reactions and Quantities
- 10) Gases Laws
- 11) Solutions and Types of Concentrations
- 12) Basic concepts of chemical kinetics and equilibrium
- 13) Acids and Bases.
- 14) pH of solutions
- 15) Buffers

Attendance and Preparation Policy: Students are expected to attend all class meetings. However, attendance in class is **not** recorded (with some few exceptions). Students are responsible for class preparation and for any material presented in the course of the lectures *whether or not it is contained in the textbook*. Chemistry is a *highly* structured course, with each new topic based on others previously developed. Thus it is *critical* for students to keep *consistently* up-to-date in their readings and assignments. To fall even one class period behind is to risk considerable difficulty in mastery of future material. Therefore students should:

- 1) Review previous material, especially if it was not perfectly understood
- 2) Complete reading assignments *before* the lecture in which the topics are covered, or at least immediately after the lecture
- 3) Complete assigned problems and exercises on time, with an emphasis on mastery of concepts and principals involved rather than looking for a formula that will give the expected answer (*remember that the question can be asked in a different way and not just with different numbers!*)
- 4) The average student needs to do **12-15 hours of work outside of class** (20:80 split between reading and problem solving) in order to earn a passing grade for this class. A student earning high B's and above typically does more than this.

Withdrawal Policy: A grade of W will be assigned if the student officially withdraws by midpoint. After midpoint, withdrawal will result in a WF grade.

The University requires that faculty members must, on a date after the midpoint of the course to be set by the Provost (or his designee):

- 1) Give a WF to all those students who are on their rolls but no longer taking the class and
- 2) Report the last day the student attended or turned in an assignment.

Incomplete: An incomplete (I grade) is available only in the event that the course has been essentially completed. If the student misses the final exam due to illness, injury, or other special circumstance, he/she may request an I grade. Documentation will be required confirming the illness or other difficulty. The I grade must be made up within one semester. If not made up within one semester, the I grade automatically reverts to an F. Note that the student may receive an I grade only if he/she is passing the course but is unable to take the final exam only.

Classroom Conduct:

Students are expected to act with respect for the professor and other members of the class. In order to maintain a beneficial learning environment, *Rude* and/or *Disruptive* behavior will **NOT** be tolerated. Any student whose conduct is deemed inappropriate will be asked to leave the class.

The following are considered rude and disruptive:

- Conducting private conversations in the class during lecture/discussion.
- Not paying attention during lecture/discussion.
- Consistently arriving late for class. (In the event of a late arrival, enter and take a seat *quietly*.)
- Leaving class early. (This should occur only in an emergency)
- Walking in-and-out of the classroom while class is in session.
- Ringing beepers and cellular phones. (These should be turned off sound while in class.)

Course Grade: The course grade will be determined as a result of a student's individual work as follows:

Major Exams - 3	270 pts
Pre-Chapter quizzes -10	50 pts
i>clicker sessions	50 pts
Pop quizzes in class - 5	30 pts
Lab	200 pts*
Final Exam	200 pts
Total	800 pts

*You must attend your laboratory section – at the end of the semester your laboratory instructor will give me a list of students in their section and their laboratory grades.

Letter grades are assigned based on the following scale (which may be varied slightly):

<u>Total Course Points Earned</u>	<u>Total Course Points Earned (%)</u>	<u>Letter Grade</u>
>765	>95.6	A+
720-764	90.0-95.5	A
696-719	87.0-89.9	A-
684-695	85.5-86.9	B+
640-683	80.0-85.4	B
616-639	77.0-79.9	B-
584-615	73.0-76.9	C+
560-583	70.0-72.9	C
536-559	67.0-69.9	C-
480-535	60.0-66.9	D
<480	<60.0	F

To receive a passing grade in this course, the student MUST at least

- 1) take successfully the final examination
- 2) meet certain minimum requirements in the laboratory portion of the course (see lab manual).

Examinations: There are 3 major tests in this course during summer semester. **There will be no make-up exams and quizzes.** Missed examinations and quizzes will receive a grade of *zero*.

Note: Dr. Stroevea does not reveal grades via email or phone due to privacy issues.

The only electronic device allowed during exams is a scientific NON-POGRAMABLE calculator. Students are *not* allowed to use the following devices during exams such as: Computers, IPods, Cell phones, IPads, Computerized dictionaries, Palm pilots, Programmable calculators, Molecular models.

Final examination is a standardized, multiple choice examination covering all the material from CHEM 1151. This test is provided by the American Chemical Society (ACS) and is nationally normalized. It is the student's responsibility to be on time for the administration of exams. **No extra time will be given to those who show up late for the exam. Final exam is comprehensive. For your final exam you have to show up on December 06, at 7:50 AM.**

Pre-Chapter quizzes: These are on-line quizzes. They will include questions on definitions and major concepts. The main idea is to skim through the textbook before the lecture to get familiar with terminology, strategies, and main concepts. Quizzes will be set up via iCollege. Each quiz will be opened 24 hours before new chapter is given. Students must be aware that some pre-chapter quizzes will be open during weekend time. It is students' responsibility to check quizzes availability. Students are responsible to use trustful internet connection. **There will be absolutely no allowed make-up pre-chapter quizzes.**

Clicker sessions: these sessions will be conducted using clickers and are designed to be quick, in-class, regularly administered EVERY DAY sessions. Clicker questionnaires are great to provide frequent immediate feedback to the instructor. They provide excellent support to the work in the classroom and allow classroom time to be used efficiently and to be tailored to the needs of the participating students.

Therefore, it is students' responsibility to have their clicker devices ready to be used during the class session. **There will be absolutely no make-up clicker sessions allowed.**

No clicker, no participation, no grade!

Pop quizzes in class: these quizzes will be given in class as questions with short answer. Quizzes will cover conceptual questions, definitions and calculations. There are 5 quizzes per semester. **The dates of quizzes will not be announced ahead of time. There will be absolutely no make-up pop quizzes allowed**

Chemistry Department Policy on Student Conduct and Integrity: The Georgia State University Policy on Academic Honesty is in force in this course. This includes but is not necessarily limited to infractions in the area of *plagiarism, cheating on examinations, unauthorized collaborations, falsification, and multiple submissions.* This policy is published in *On Campus: the Student Handbook*, which is available to all members of the university community.

All examinations must represent your individual effort, with no unauthorized aid. To either *give* or *receive* unauthorized information during an examination is cheating, as is the use of *any*

unauthorized supplementary material. In addition all laboratory work performed in conjunction with this course must represent your individual effort. Only original data obtained by your own *in-laboratory* experimentation are permitted to be used, except when *expressly authorized* by your laboratory instructor. Data from supplementary sources, handbooks, reference literature, etc. must be *clearly referenced* (title, author, volume, pages(s), etc.). Falsification or destruction of data constitutes cheating as well. Conduct disruptive of class, examinations, or laboratories *or* falsification or destruction of information related to chemistry courses will be taken as a violation of the policies of the Board of Regents of the University System of Georgia and the Georgia State University Student Code of Conduct, Section 6.0. Any suspected offenses may be referred to the Chairman of the Department or the Dean of Students for appropriate disciplinary action.

Americans with Disabilities Act Statement: If you are a student who is disabled as defined under the Americans with Disabilities Act and require assistance or support services, please seek assistance through the Office of Disability Services.

Affirmative Action Statement: Georgia State University adheres to affirmative action policies designed to promote diversity and equal opportunity for all faculty and students.

Statement of Non-Discrimination: Georgia State University supports the Civil Rights Act of 1964, Executive Order #11246, Title IX of the Educational Amendments of 1972, Section 504 of the Rehabilitation Act of 1973, and the Americans with Disabilities Act. No person shall, on the basis of age, race, religion, color, gender, sexual orientation, national origin or disability, be excluded from participation in, or be denied the benefits of, or be subjected to discrimination under any program or activity of the college.

Syllabus and Assignments: The foregoing provides a *general* plan for the course, *deviations from which may be necessary*. The instructor will announce any such changes in class. One of the best ways to prepare for examinations in survey chemistry is to work as many problems as possible, work in study groups, and attending office hours on weekly base.

Tentative schedule*: Fall 2017 (might be changed, under instructor's discretion)

Date	Chapter	Check point
08/21	Orientation, Chapter 1	Attendance is STRONGLY recommended
08/23	Chapter 2	Pre-chapter 1 and 2
08/28	Chapter 2	
08/30	Chapter 3	Pre-Chapter 3
09/06	Chapter 3	
09/11	Chapter 4	Pre-Chapter 4
09/13	Chapter 4	
09/18	Chapter 5	Pre-Chapter 5
09/20	Chapter 5	
09/25		Exam I
09/27	Chapter 6	Pre-Chapter 6
10/02	Chapter 6	
10/04	Chapter 7	Pre-Chapter 7
10/09	Chapter 7	
10/10		SEMESTER MIDPOINT LAST DAY TO WITHDRAW
10/11	Chapter 7	
10/16	Chapter 7	
10/18	Chapter 8	Pre-Chapter 8
10/23	Chapter 8	
10/25		Exam II
10/30	Chapter 9	Pre-Chapter 9
11/01	Chapter 9	
11/06	Chapter 10	Pre-Chapter 10
11/08	Chapter 10	
11/13	Chapter 11	Pre-Chapter 11
11/15	Chapter 11	
11/27	Chapter 11	
11/29		Exam III
12/04	Review	
12/06	8:00 – 10:30 AM	FINAL EXAM

- Students have to check iCollege on daily basis.
- Pop quizzes are not shown in the schedule