CHEM 120a **General, Organic, and Biological Chemistry** Win 2021

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Lecture Times: Online lecture powerpoints.
Course web page: http://bb.siue.edu

Textbook:

Timberlake. "*General Organic, and Biological Chemistry: Structures of Life"* 6th Edition
WS1: Available via textbook rental (shipping is possible)
CM1: will need to purchase a code

Required Supplemental Material:

Holovics. *General, Organic, and Biological Chemistry notes*, Available at cougar bookstore.

Mastering Chemistry Pearson account (homework system)

WS1: Code included

CM1: will need to purchase a code

Course Description and Objectives:

Chemistry 120 is a course in the fundamental principles of chemistry targeted primarily for students planning careers in nursing and other allied health professions. The material is designed to develop working knowledge of those areas of chemistry most relevant to human health and disease. In addition, 120a and 120b fulfill the requirements for General Education as introductory and distribution courses, respectively, in the Natural Sciences and Mathematics Area. The companion laboratory courses to 120 a and b are separate and are designated Chemistry 124a and b, respectively.

The objectives of this course include that each student in the class should:

- Develop critical thinking skills that lead to understanding of chemical principles,
- Develop self-confidence with chemistry that comes with understanding,
- Develop an appreciation of the beauty of chemistry and its relevance to our lives,
- Develop the ability to locate and analyze the information that is needed for their next class, for their future careers, and for daily living.

Grading: The overall course grade will be calculated out of 1000 points as follows:

Exams	2 Exams (200 points each)	= 400 points	40%
Lecture scores	Watching online material	= 100 points	10%
Homeworks	10 x 30 point homework sets	= 300 points	30%
Quizzes	5 quizzes x 40 pts each	= 200 points	20%
	Total	= 1000 points	100%

Grading is not competitive – there is no "curve". Grades are assigned based on the following cutoffs, which may in the end be lower but not higher:

A ≥ 90% (900 pts) > **B** ≥ 80% (800 pts) > **C** ≥ 70% (700 pts) > **D** ≥ 60% (600 pts) > **F**

Online lectures:

Before each unit you can print off the online lecture notes. These notes contain the power point slides that will be used. In the notes you will notice gray boxes for problems and key points that need to be filled in. Each chapter lecture can be watched and you can follow along with lectures filling in the gray boxes as you go along. It is imperative you keep up with the schedule, it is very easy to fall behind with an online course, don't let it happen to you.

Examinations:

Midterm Exam	December 30th	Chapters 1 - 6
Final Exam	January 10th	Chapters 7 - 11

The 2 exams during the semester will include conceptual and problem solving questions from lecture material and assigned readings. Many (*but not all)* of the problems will be similar (*but not identical*) to problems assigned in workshop, lectures and homework. Although each exam will focus on the specific chapters outlined above, learning subsequent chapters requires building up from a knowledge base of previous chapters. In other words, material from previous chapters can show up on later exams. All of the exams will be taken online at a very specific time frame. Please be sure you have a stable online connection for the 2 exam date/times. You will have 2 hours to take the exam. Exams will be taken within a 24h window. You will need to make an exam appointment for a 2h block in that 24h period.

Quizzes:

Throughout the semester, scheduled quizzes will be given as appropriate to encourage you to keep up with the lecture/book material, and help you and the instructor assess your progress. The online quizzes will be scheduled for you to take within a certain time frame. After they become available you will be able to take this quiz only once so be sure you have time to complete it before you open the quiz. The quiz will also have a time limit so once opened you only have 60 minutes to finish the quiz. There will be 5 quizzes 40 points each.

Homework:

Regular problem solving work, both calculations and reasoning, is essential to deepening your understanding of chemistry. You are strongly encouraged to work problems from the textbook, checking your answers and emailing questions to the instructor until you feel comfortable with the course content.

To reward the consistent effort that keeping up with course material requires, and to encourage making that consistent effort, there will be regular online homework through the Blackboard course site. There will be a total of 10 homeworks each will be worth 40 points (for 400 points total). These HWs are designed to help you learn to do long answer problems through calculations problems and understanding concepts through multiple choice problems. Although you must complete your own HW and your HW will be different from your classmates, I would encourage you to form study groups to help with your understandings of the problems.

We will be using the mastering chemistry homework system. It is designed to help you understand what you are doing wrong through various tutorials and problems. The great thing about using the mastery program is that very often it can guide you through the problems using hints and explanations. I would encourage you to take advantage of this excellent learning guide. This is where the majority of the problem solving practice will take place so it is very important to set aside **ample time** to work through these problem sets. Most chapter homeworks will take between 3-6 hours each. **DO NOT WAIT UNITIL THE LAST MINUTE TO DO THE HOMEWORK!**

Student Pearson Homework Registration Instructions

To access your MyLab, Mastering, or REVEL product from your Blackboard course *(this must be done from a computer, not a mobile tablet or phone)*

a. Work on a Computer (not a mobile tablet or phone)
b. Start from your CHEM 120a Blackboard course.
c. Navigate to the left hand bar, and look for the "Pearson access code" tool. Click into it. This is where you will gain information on retrieving your code. Get your code.
d. Navigate back to your BlackBoard Course
e. Select a content area (named Homework) from the left navigation.
f. Click MasteringChemistry Course Home
g. If you have a Pearson account, enter your username and password. Otherwise, create a new account.
h. Enter your access code
i. Your MyLab/Mastering/REVEL Homework content appears.

To go back to Blackboard, look for the Blackboard tab or window in your browser.
That's it. Throughout the semester, **please access your Mastering/MyLab/REVEL content through Blackboard only**.

Need help?

Ensure students are using **Google Chrome**. Avoid Internet Explorer!

Visit Pearson Support at https://support.pearson.com/getsupport.

Practice problems:

Each chapter has a set of practice problems with answers. These problems will help you get a hang of the chapter concepts and prepare you for the homeworks and quizzes.

Academic Integrity

The Student Academics and Performance section (Chapter 1, Section I) of Policies and Procedures at Southern Illinois University Edwardsville will be upheld in this class. Be sure that all written assignments are in one's own words. Papers written by others or drawing on others' work without acknowledgment will not be accepted and may result in a failing grade for the course. We will be utilizing proctorU to be sure the Academic Integrity of the exams is being upheld.

Academic Misconduct by Students

Faculty members retain their traditional authority to take disciplinary action in the event of academic misconduct such as cheating, plagiarism, or classroom disruption. Students have the right to learning experiences that are free of favoritism, prejudice, discrimination, or harassment. In addition, students in this class are about to become professionals, and as such are expected to behave professionally and may expect to be treated professionally. In the event of academic misconduct, sanctions may include a failing grade on an individual assignment or on a course as a whole or the recommendation of other sanctions such as dismissal from a major or from the University.

Dropping from the course:

Deadlines for withdrawing from this course follow the guidelines published by the university. See the calendar at the end of the syllabus for the specific guidelines. In case of any inconsistencies, the correct version is that on the SIUE website (www.registrar.siue.edu).

How to do poorly in this course:

Instructors have seen the following behaviors too many times. Students who generally try these things do not do well in this course:

- Falling behind on the online lecture slides
- Give yourself plenty of time for the homework. Many problems have hints (Use them!)
- Wait until right before the quiz/exam to begin studying.
- Think that you understand the material without working lots of problems.
- Lowering effort after getting one good grade (the first few chapters should be review).
- One A cannot balance out 3 F's.
- Expect to catch up after falling behind the schedule. Since chemistry knowledge is cumulative, people who fall behind tend to stay behind.
- Wait until the last week of class, to email the professor's and say, "I think I'm flunking your course. What should I do?" By then, it's too late. Get help early.

How to do well in this course:

Recognize from the start that chemistry is a subject that requires a lot of time and work. At the university level, you earn a grade based on your demonstrated mastery of the material, not on how hard you try. With that said, instructors have a compiled a few suggestions that will help you to be successful in this course:

1. *Recognize the time commitment*.
   As stated in the SIUE 2006-2007 Undergraduate Catalog on page 17, This is a 15 week class condenced into 3 weeks. Therefore, you should not expect to pass CHEM 120a if you do not spend *at the very least* **6-8 hours a day** reading, going through lecture material, homeworks, workshops and quizzes.

2. *Take an active part online.*
   Keep up with the scheduled book reading/lectures and solve problems each day. Actively answer work on homeworks and email questions to clarify material you are unsure about. Take advantage of the free online tutors they are there to help you clarify topics. Be sure to keep track of the due dates. Be sure to make arrangements to be online (undisturbed) for the quizzes and exam times.

3. *Remember that learning is your own responsibility.*
   The professor will help you out as much as possible, but the professor can't learn it for you. Paying for a university course is like buying a health club membership. Simply making the purchase does not entitle to you to a great physique. A personal trainer can show you what you need to do, but it's up to you to work out regularly if you want to see any results. Also, you can't watch a personal trainer lift weights and assume it will be just as easy for you. Similarly, you will have to work chemistry homework problems yourself on a regular basis to see any results in this course. Don't fool yourself into thinking that by watching the instructor solve a problem you understand it.

4. *Work the problems*.
   The number one reason why students fail chemistry is that they don't work enough problems. Practice with the examples in the textbook. The self-assessment questions at the end of each chapter are an excellent review of the concepts. Practice with enough problems so that you can work a problem for beginning to end without relying on notes or the solutions manual.

5. *Get help!*
   Don't be afraid that you will look stupid if you ask anyone if you are having trouble. It's smarter to get help when you need it than to try to do without it. Take advantage of the free online tutors they are there to help you clarify topics. Please email the tutors/professor when anything is unclear. You can make your emails with the professor more effective if you have specific things to ask about such as "I tried to work problem 23 but I keep getting 194 instead of 7.2" or "I don't understand why you multiplied by 4 in this example" rather than "Help me, I'm lost" or "I don't get chapter 8." If you email us the work you used to solve the problem, it is much easier for us to point out your error. Feel free to email us a photo of your work for us to look over

6. *Have a good attitude*.
   It is easy to say that you hate chemistry, but if you make this choice, you will find it harder to study and keep up with the material. Who wants to spend time with something they hate? There is something fun and interesting in every subject if you allow yourself to see it.

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Tentative Lecture and Exam Schedule

Monday	***Tuesday***	***Wednesday***	***Thursday***	***Friday***	***Saturday***	***Sunday***
December 21	December 22	December 23	December 24	December 25	December 26	December 27
Chapter 1 R: 1.1 – 1.5	Chapter 2 R: 2.1-2.7 **HW1: Intro to mastering**	Chapter 3 R: 3.1-3.7 **HW2: CH 1 & 2 DUE** **Quiz 1 (2)**			Chapter 4 R: 4.1-4.8 **HW3:CH3&4 DUE**	Chapter 5 R: 5.1-5.6 **HW4: CH 5 DUE** **Quiz 2 (5)**
December 28	December 29	December 30	December 31	January 1	January 2	January 3
Chapter 6 R: 6.1-6.5	Chapter 6 R: 6.6-6.9 **HW5: CH 6 DUE**	**Midterm EXAM**		Chapter 7 R: 7.1-7.5	Chapter 7 R: 7.6-7.10 **HW6: CH 7 DUE** **Quiz 3(7)**	Chapter 8 R: 8.1-8.4
January 4	January 5	January 6	January7	January 8	January 9	January 10
Chapter 8 R: 8.5-8.8 **HW7: CH 8 DUE** **Quiz 4(8)**	Chapter 9 R: 9.1-9.6 **HW8: CH 9 DUE**	Chapter 10 R: 10.1-10.5 **HW9: CH 10 DUE**	Chapter 11 R: 11.1-11.5 **Quiz 5(10)**	Chapter 11 R: 11.6-11.8	**HW10: CH 11 DUE**	**Final EXAM**

Online Tutoring: TBD