



Instructor: Dr. Polina Pine

Phone 83134

Email: ppine@luc.edu

Office Location: FH-403

Office Hours: M 1:30-2:30pm////W 10:00-11:00am

Lectures: MWF 11:30-12:20am FH Auditorium

You must also be registered in one of the following discussion sections:

Discussions: 015 – F 9:20-10:10 am FH-105

016 – F 10:25am-11:15am FH-105

Best and fastest way to contact Dr. Pine is in person during the office hours; after/before the Discussions of CHEM102-017 on Thursdays; brief questions may be asked before/after M/W lectures. If email is sent after 5pm during business days it may be answered the afternoon of the next day or within 48 hours. If email is sent after 3pm on Friday, most likely it will be answered on Monday.

Course Content & Objectives

Prerequisite knowledge from Chemistry 101 is necessary for in-depth study of topics in Chemistry 102. We will focus on applying a conceptual understanding of fundamental chemical principles. Students will continue to learn the language of chemistry and develop their skills in scientific problem solving and critical thinking. This will serve as a foundation for further study in chemistry, other sciences and related disciplines.

The material is highly cumulative over two semesters, such that you will be able to do the following:

- Use multiple perspectives of matter (macroscopic, particle, symbolic levels) to qualitatively describe and explain characteristics, properties, and relationships of the following: liquids and solids, solutions, reaction kinetics, equilibria, acids and bases, reaction thermodynamics, electrochemical reactions, nuclear reactions.
- Quantify relationships between variables controlling chemical systems.
- Solve quantitative multistep problems combining multiple concepts within the systems.
- Differentiate among closely related factors, categorize problem types, and select appropriate tools to solve these problems.
- Apply chemical principles to explain natural phenomena.

The link to the evaluation of the course will be sent to students at the end of the term. Please find 2-3 minutes to fill this online survey. Please remember that as the evaluation manual states: “*..As student raters, you should also know that the results of your ratings for this class will be included as part of the information used to make decisions about promotion/tenure/salary increases for this instructor. Fairness to both the individual and the institution require accurate and honest answers.*”

Prerequisites

Chemistry 101 or 105 and completion of Math 118 with a grade of C- or better.

Required Text

- Chemistry The Central Science, Brown/LeMay/Bursten/Murphy/Woodward, 14th edition.

(if you decide to use 13th edition talk to Dr. Pine during the first week of classes, please do not send emails about it it may be overlooked).

Course Materials

- Mastering Chemistry course ID: **SPR2020CHEM102PINE014**
- follow <http://www.pearsonmylabandmastering.com/northamerica/masteringchemistry/> for mastering chemistry assignments
- Scientific Calculator
- Computer
- Color pens and piles of loose paper for notes and homework
- HB2 pencils
- Access to printer
- **Positive attitude**

Please note that materials from this course cannot be shared outside the course without the instructor's written permission (as reminded by the CAS Dean's Office memo, Jan. 2020).

The Tentative Lecture Schedule is posted on Sakai under Recourses. Students are expected to read the textbook before and after the lecture. It is recommended to print out the Schedule of the class and put it in the sight access.

Our actual pace and the topics may vary from the schedule.

Learning procedure (Absolutely NO Technology!!!)

- **Taking Photos**
- **No taking Videos**
- **No Audio recording**
- **No iPads, no computers, no electronics, no notetaking apps**
- Only positive, respectful behavior is tolerated in this class. Please see **Harassment (Bias)** section at the end of the Syllabus.
- To contact Dr. Pine by email put CHEM102-YOUSECTION in the Subject field. Any email without this subject line may be sent to the spam and overlooked.
- **Using the computers, cell phones and tablets is not allowed. Must be kept in the bag only and operated on silent mode during lecture, discussion.**
- **It is student's responsibility to follow the announcements, and all policies of the class.**
- The class lectures and discussions will be the most critical source of information for this course. If you miss a lecture, please find notes from another student in class.
- **Make-up assignments, exams, quizzes are not available for this course.**
- It is impossible to study chemistry without solving problems from the back of each chapter independently on one's own.
- Classes will be given as a combination of the following formats: board, multimedia, use of models, discussions, independent and facilitated problem solving.
- Dr. Pine's lecture slides if posted on Sakai may be doubling the material in the class or covering material that expected to be covered by students independently. Follow the announcements in class and ask Dr. Pine during the class, after or before the lecture if anything remains unclear.

- The study guides in form of problems kits (discussion handouts) if assigned will be posted on Sakai, students must print these handouts, bring them to every class and follow all directions given in the handout (more details about the discussion handout and their incorporation in the final grades will be given during the first Discussion)
- **Please note that materials from this course cannot be shared outside the course without the instructor's written permission (as reminded by the CAS Dean's Office memo, Jan. 2020).**

Grading policy

Letter grades are only assigned to your Total score, not to individual assignments, quizzes or exams.

Mastering Chemistry	15%
Exams	85%

- The lectures are supplemented by the Discussion session. Each Discussion Handout (DH) is 1 point added to the following unit exam. Getting the credit for the DH is **based on following the format of both the Discussion Handout and Class Participation**. The DHs will be posted on Sakai. **You must bring printed handout to the Discussion, attend and participate in the Discussion to get credit for the DH.** The DH will be submitted as handout packets in person three times: during the last Discussions right before each unit exam. The format of the submission is given below:
 1. It must contain the printed cover page with ALL fields filled (posted on Sakai under resources).
 2. The packet has to be stapled
 3. The DH of the sessions that the student did not attend are not accepted.

If you do not submit the DH in person or the submission does not follow the format no points will be granted. During the Discussions that do not require the submission of the DH for credit no points are given, but the material discussed in the session is essential for the course and the exams. More details will be given during the first Discussion Session.

- There will be three unit exams and one final exam. **No early exams, no make-ups for any reason!** Every unit exams: 50 minutes (sharp), the dates are given in the tentative schedule. Unit-exams are given on Wednesdays (see tentative schedule table): **February 5th, February 26th, and April 1st** The midterm and the final letter grades will be given based on the points scored in the course only. To take into consideration students' personal circumstances (weddings, funerals, sicknesses, jury duties, etc.) two options of the final score calculation were developed. If you miss one unit-exam for any reason, the missed exam will be dropped and Option 2 (given below) will automatically be used to determine your grade. A second missed unit exam will result in a score of zero for the missed exam. There are NO EXTRA ASSIGNMENTS NO MAKE-UP EXAMS OR QUIZZES. Under no circumstances may an exam be taken at a time and date other than that assigned.

Exams comprise 85% of your total course score, and will be automatically calculated as the higher score between these two options:

$$\text{Option 1: Total_Exam} = 0.2 * (\text{Exam1} + \text{Exam2} + \text{Exam3}) + 0.4 * \text{Final_Exam}$$

Option 2: $\text{Total_Exam} = 0.2 * (\text{Two_Best_Unit_Exams}) + 0.6 * \text{Final_Exam}$

Final score = $\text{MC} * 0.15 + \text{Total_Exam} * 0.85$

All exams will be graded within seven business days. All points are converted to percentage for the final score calculation. The scores of the unit-exams will be published on Sakai. Students must pick up their score reports or exams booklets (if available) within one week after the scores are published during the times announced by the instructor only, not during any other time. Issues with the graded exams must be submitted within 7 calendar days of being returned, otherwise scores will be considered final.

- **Final exam has to be taken during the scheduled time only! No exceptions!**

Final exam: two hours - MANDATORY. The final exam must be taken on the date scheduled or a grade of F will automatically result. Final exam is comprehensive and cumulative. For exact day and time check here: http://www.luc.edu/academics/schedules/spring/exam_schedule.shtml)

Initial schedule for the final exam is

If you are enrolled in CHEM102-014 (11:30-12:20 lectures) then it is Monday, April 27th 2020 1:00-3:00 pm

No make-ups, no early dates for the exams for any reason.

The approximate grading scale is the following: 88.0% is the lowest A-; 75.0% is the lowest B-; **60.0% is the lowest C-**; 51.0% is the lowest D, 50.0% and lower is F.

A	A-	B+	B	B-	C+	C	C-	D+	D	F
100-94	93-88	83-87	79-82	75-78	70-74	65-69	60-64	55-59	51-54	50 and lower

March 26th - Last day (5:00 p.m.) to withdraw with a grade of "W", after this date, the penalty grade of "WF" is assigned.

The Exams procedure

All purses, bags, jackets, etc must be left at front of the room. Once the exam is distributed, if you exit the room for any reason before time is up, your exam is complete and will be collected.

Phones, tablets and any electronic devices are not permitted. You will get the Periodic Table, exam booklet and a scantron for the multiple-choice portion. Come to the exam with **three** items only: working **HB-2 pencil(s)**, working approved **calculator without a cover** (extra batteries are recommended), and your **Loyola ID** visible on your desk to be checked during the exam. If you are unsure whether your calculator is ACT-exam-approved, check the list at: <http://www.actstudent.org/faq/calculator.html>.

Instructor Privileges

Instructor reserves the right to make changes and adjustments to this syllabus as necessary, including, but not limited to, the grading policy and course schedule.

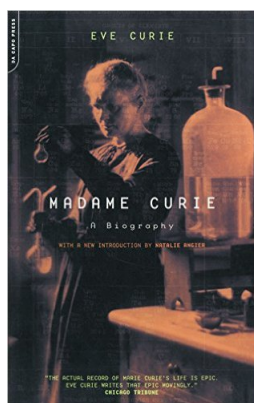
Homework Policy

The Home Work will be given online in the form of Mastering Chemistry at <http://www.MasteringChemistry.com> and will be graded. It is students' responsibility to follow the deadline for the submission (usually the submission is once a week). Late submission will result "zero" for this assignment. **The suggested End-of-Chapter problems are given** but NOT graded. A list of Highly Recommended Textbook problems will be posted under RESOURCES on Sakai. Students must solve these problems on their own and seek for the help if needed during office hours or schedule a time around the Discussion sections based on Instructor's availability.

Optional Text (recommended but not required):

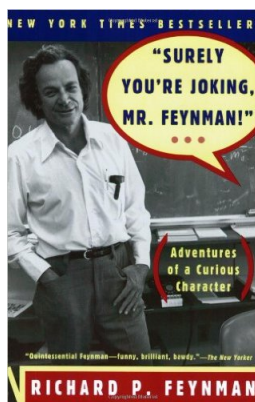
Madame Curie: A Biography

Author: Eve Curie



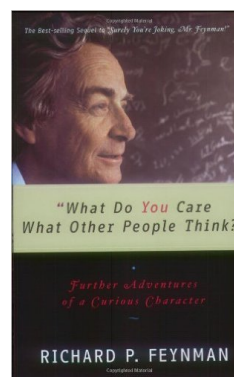
Surely You're Joking, Mr. Feynman! (Adventures of a Curious Character)

Author: Richard P. Feynman



"What Do You Care What Other People Think?": Further Adventures of a Curious Character

Author: Richard P. Feynman



Course Repeat Rule

Students are allowed only THREE attempts to pass Chemistry courses with a C- or better grade. The three attempts include withdrawals (W). After the second attempt, the student must secure approval for a third attempt. Students must come to the Chemistry Department, fill out a permission to register form or print it from the Department of Chemistry & Biochemistry website: <http://www.luc.edu/chemistry/forms/> and personally meet and obtain a signature from either the Undergraduate Program Director, Assistant Chairperson, or Chairperson in Chemistry. A copy of this form is then taken to your Academic Advisor in Sullivan to secure final permission for the attempt.

Academic Integrity

Trust and integrity are important qualities in students. All submitted work must represent your own work and your own work only. Academic dishonesty of any kind, such as plagiarism and cheat sheets on exams, sharing information about quizzes or exams with other students or other sections prior to any scheduled exam that these students are taking will not be tolerated. Any student caught cheating on an assignment in any way will receive a “zero” for that assignment and be reported to Chairperson of the Chemistry Department and the Dean School of Art and Science. For further information regarding the Academic Integrity policy and disciplinary procedures, refer to the Undergraduate Studies Catalog: http://www.luc.edu/academics/catalog/undergrad/reg_academicintegrity.shtml.

Students seeking Special Accommodations (SAC)

If you have any special needs, please bring me an official letter from the Student Accessibility Center SAC in the first week of classes. The university provides services for students with disabilities. Any student who would like to use any of these university services should contact the Student Accessibility Center (SAC), Sullivan Center, (773) 508-3700. Further information is available at <http://www.luc.edu/sac/>

Students with documented evidence of the time extension must take the exams in the SAC center ONLY with prior arrangement (usually at least one week before the exam). There will be no possibility to accommodate the extra time outside of the SAC center. The start time of the exam must be the start time of the actual lecture or scheduled in such a way that the time of the exam of the student taking the exam in the SAC center overlaps with the exam time of the class.

Loyola University Absence Policy for Students in Co-Curricular Activities:

Students missing classes while representing Loyola University Chicago in an official capacity (e.g. intercollegiate athletics, debate team, model government organization) should discuss with faculty the potential consequences of missing lectures and the ways in which they can be remedied. Students must provide their instructors with proper documentation (develop standard form on web) describing the reason for and date of the absence. This documentation must be signed by an appropriate faculty or staff member, and it must be provided as far in advance of the absence as possible. It is the responsibility of the student to make up any assignments. If the student misses an examination, the instructor is required to give the student the opportunity to make up examination at another time that fits the class schedule and requirements (<https://www.luc.edu/athletheadvising/attendance.shtml>)

Tutoring Center

The CTAE offers several different programs each semester, including class-specific tutor-led small groups, Academic Coaching groups dedicated to general academic support, and a Study Buddy Directory for students seeking out more independent collaboration with other students in the same class or subject area. **The recommended tutor for this class is Gondi Suma sgondi@luc.edu**

For more information refer to http://www.luc.edu/tutoring/Small_Group_Info.shtml

Harassment (Bias Reporting)

It is unacceptable and a violation of university policy to harass, discriminate against or abuse any person (student or instructor) because of his or her race, color, national origin, gender, sexual orientation, disability, religion, age or any other characteristic protected by applicable law. Such behavior threatens to destroy the environment of tolerance and mutual respect that must prevail for this university to fulfill its educational and health care mission. For this reason, every incident of harassment, discrimination or abuse undermines the aspirations and attacks the ideals of our community. The university qualifies these incidents as incidents of bias. In order to uphold our mission of being Chicago's Jesuit Catholic University-- a diverse community seeking God in all things and working to expand knowledge in the service of humanity through learning, justice and faith, any incident(s) of bias will be reported and appropriately addressed. Therefore, the Bias Response (BR) Team was created to assist members of the Loyola University Chicago community in bringing incidents of bias to the attention of the university: <http://webapps.luc.edu/biasreporting>

A link to the official Loyola calendar can be found here: <http://luc.edu/academics/schedules/index.shtml>