

University of Montana

## ScholarWorks at University of Montana

---

University of Montana Course Syllabi

Open Educational Resources (OER)

---

Fall 9-1-2020

### CHMY 104.00: Preparation for Chemistry

Lu Hu

*University of Montana, Missoula*, [lu.hu@umontana.edu](mailto:lu.hu@umontana.edu)

Follow this and additional works at: <https://scholarworks.umt.edu/syllabi>

**Let us know how access to this document benefits you.**

---

#### Recommended Citation

Hu, Lu, "CHMY 104.00: Preparation for Chemistry" (2020). *University of Montana Course Syllabi*. 11265. <https://scholarworks.umt.edu/syllabi/11265>

This Syllabus is brought to you for free and open access by the Open Educational Resources (OER) at ScholarWorks at University of Montana. It has been accepted for inclusion in University of Montana Course Syllabi by an authorized administrator of ScholarWorks at University of Montana. For more information, please contact [scholarworks@mso.umt.edu](mailto:scholarworks@mso.umt.edu).

**CHMY 104 - Preparation for Chemistry  
Fall 2020**

**Professor:** Dr. Lu Hu  
Email: [lu.hu@mso.umt.edu](mailto:lu.hu@mso.umt.edu)  
Website: <http://hs.umt.edu/luhu/>  
Zoom meeting link: <https://umontana.zoom.us/j/2415948974>

**Teaching Assistant: Catie Wielgasz**  
Email: [catherine1.wielgasz@umconnect.umt.edu](mailto:catherine1.wielgasz@umconnect.umt.edu)  
Zoom meeting link: <https://umontana.zoom.us/j/98454901838>

**Office hours:** (see above for the Zoom links)  
Monday, 9:00-10 am via Zoom, Wielgasz  
Tuesday, 10:00-11:00 am via Zoom, Hu  
Wednesday 10:00-11:00 am via Zoom, Hu  
Thursday, 9:00-10 am via Zoom, Wielgasz  
(You can set up another time by contacting Catie or me).

**Checkout program for Laptops, webcams, or WiFi hotspots:** Moodle and Zoom will be essential for this Fall, unfortunately. If you need to any help with internet access or laptops, UM has several programs that may be helpful. The library has a laptop and webcam check out program that allows 1-month loan. Check <https://www.lib.umt.edu/services/tech-request> . Let me know if you need any help regarding using and assessing Zoom.

**Required textbook:**  
Introductory Chemistry: An Active Learning Approach, Mark Cracolice, **7th edition + OWLv2**, ISBN 9780357584637

UM bookstore link:  
[https://montanabookstore.bnccollege.com/shop/BNCB\\_TextbookDetailView?displayStoreId=88986&urlRequestType=Base&catalogId=10001&productId=600009307422&langId=-1&partNumber=MBS\\_2350227&storeId=88986&sectionId=95925231&item=N](https://montanabookstore.bnccollege.com/shop/BNCB_TextbookDetailView?displayStoreId=88986&urlRequestType=Base&catalogId=10001&productId=600009307422&langId=-1&partNumber=MBS_2350227&storeId=88986&sectionId=95925231&item=N)

Please make sure you have the access to the OWLv2, which is an online interactive learning module (Course key is E-26R66BDBBNQ7C). If you purchase the book from the above bookstore link, it should include an access code that you can redeem for this digital solution. Here is the OWLv2 registration guide: <https://play.vidyard.com/Rt1QgEBiTH1jE8wM3khPHm> . The OWLv2 self-practice will be part of your final grade (see below). Note Dr. Cracolice donates royalties from sales of the book at UM to charity.

**Course meeting time:** WF 2:00 – 2:50 p.m., **LA Building, Room 11**, and **Zoom**  
One of these discussion sections (via Zoom at least first two weeks)

T	1:00 - 1:50 p.m.
T	4:00 – 5:00 p.m.
W	4:00 – 5:00 p.m.

**Course outcomes:** This course is designed to prepare you to succeed in the regular General Chemistry sequence (CHMY 141/142) or in a General, Organic, and Biochemistry sequence (CHMY 121/123). This course will focus on the fundamental chemistry concepts and quantitative skills that are required to appreciate and understand a rigorous introduction to chemistry. Specifically, at the end of this course, you should be able to:

- Work quantitatively with fundamental chemical concepts regarding chemical formulas, chemical relationships, stoichiometry, concentrations of solutions, gas characteristics, and energy transfer;
- Be proficient at naming chemical substances and writing meaningful balanced chemical equations;
- Understand states and characteristics of matter, including some chemical behaviors predicted by the periodic chart;
- Understand fundamental atomic theory and structure of the atom.

Successful completion of CHMY 104 should position you to do well in the General Chemistry courses at UM or anywhere else.

**Attendance Policy:** I will expect you to be at every session of the class, because that is how you will succeed in this course. I will take attendance at least weekly, including in the discussion section, and attendance will contribute a fraction of your grade (see below). You are in control of your success, and I will expect you to take a professional approach to this course, which means you will attend faithfully.

**Plagiarism:** Representation of the work of others as your own is a violation of University policy and a serious breach of ethics. When you put your name on a piece of work, you are pledging that it is your own work. In certain cases, it is permissible to incorporate the work of others provided you appropriately acknowledge that contribution. In this class, we will often work together to understand concepts, but in the end, when you are asked to demonstrate your own mastery of those concepts, and you must do so independently. Violation of the plagiarism policy (including unauthorized use of electronic devices during exams) will have serious consequences for your success in this course and at the University.

**Disabilities:** If you know or suspect that you have a disability that will interfere with your success in this course, please contact Disabilities Services at the University of Montana. They may recommend specific accommodations, and the instructor will certainly comply with those recommendations. I don't want anything to interfere with your enjoyment of chemistry!

**Course Grade:** Your course grade will be determined by your performance on the items below:

Quizzes (approx. 10):	total of 35% (The lowest quiz will be dropped.)
Exams and final:	12.5% each for a total of 50%
OWLv2 practice, and Homework:	10%
Attendance	5%

Homework will be typically assigned at the beginning of the week (10-20 questions) and due by Fridays. There will be about 1.5-hour OWLv2 self-practice for each chapter, which is

recommended before doing homework. Some of questions will be revised as quizzes for Fridays. Quiz is 15 min.

Please recognize that OWLv2 self-practice and homework are an indispensable part of your mastery of the material. Therefore, a part of your grade will be determined by turning in homework and practicing via OWL each week. Don't shirk on doing your homework and OWL! Likewise, more than 3 absences from class will result in forfeiture of that 5% of your grade.

Your final grade will be assigned according to the following ranges:

A	90-100
B	80-90
C	70-80
D	60-70
F	<60

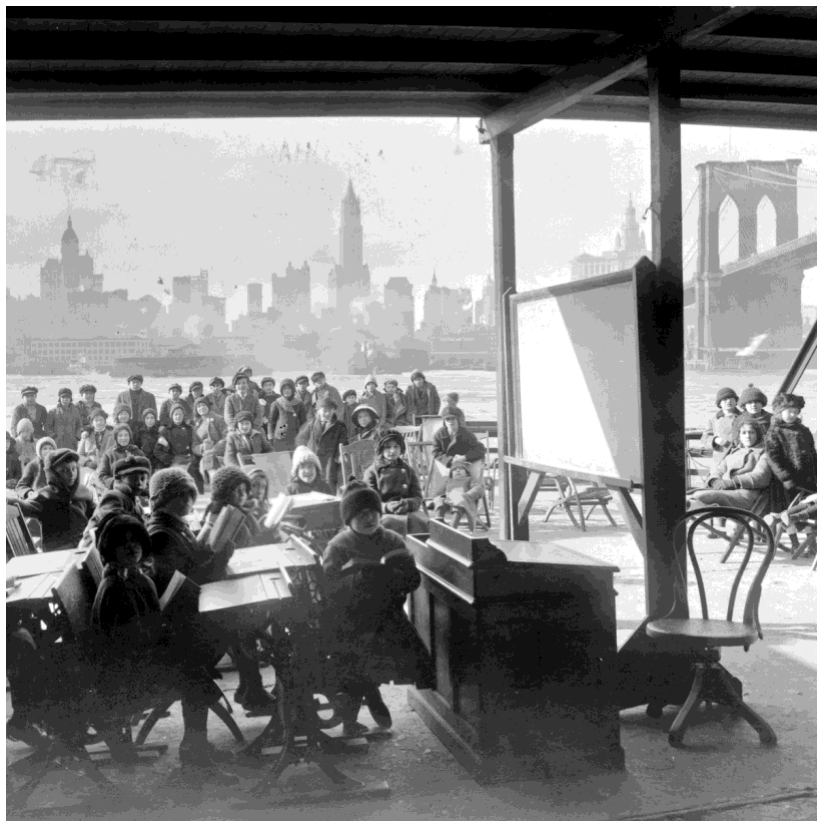
I may use the +/- system in borderline cases.

### **COVID19 related stuff:**

Only 27 students can be in the LA 11 for the lecture due to the social distancing requirement, while others will be joining the class via Zoom. We will work together for the best practice. The situation may change in the mid-semester and would require us to be flexible. Other notes just as a reminder:

- Our class will be recorded.
- Mask use is required within the classroom. [View UM's face covering policy.](#)
- Each student is provided with a Healthy Griz kit. We expect students to clean their personal work space when they arrive for class, and before they leave the classroom.
- Refill stations for cleaning supplies/hand sanitizer will be set up around campus - please learn where they are and use them.
- Classrooms may have one-way entrances / exits to minimize crowding.
- Students are discouraged from congregating outside the classroom before and after class. In the case of 3 hour-long classes, instructors should stagger breaks for small groups of students.
- Instructors should assign seating to ensure social distancing and take attendance to support contact tracing efforts.
- Instructors should not allow more students in their classrooms at any time, for any reason, than the [maximum approved capacity](#) (27 students in LA 11).
- Additional seating should not be added to classrooms.
- Drinking liquids and eating food (which requires mask removal) is strongly discouraged within the classroom.
- There is high demand for spaces on campus to accommodate students with inadequate WiFi in their homes or quick turnarounds between face-to-face and remote classes. A list of remote learning spaces with the days and times available for student use will be posted on [the Keep on Learning website](#). There will be signs posted outside of these buildings and rooms to indicate their availability.

- Stay home and contact the Curry Health Center at (406) 243-4330 if you feel sick and/or if exhibiting COVID-19 symptoms.
- If you are diagnosed with COVID-19, follow instructions for quarantine and contact your advisor so they can help you stay on track academically.
- Students, please remain vigilant outside the classroom and help mitigate the spread of COVID-19.



*What historical books will say about us during the 2020 COVID19 pandemic?*  
 (Photo: NYC students during the 1918 influenza pandemic)

**Tentative course schedule and outline:**

W	8/19	Course introduction and chemistry overview, including Chapter 1
F	8/21	Chapter 2: Matter and Energy
M	8/24	<b>Quiz 1?</b>
W	8/26	Chapter 3: Measurement and Calculations
F	8/28	<b>Quiz 2</b>
M	8/31	
W	9/2	Chapter 5: Atomic Theory
F	9/4	<b>Quiz 3</b>
M	9/7	Labor Day, no class

W	9/9	
F	9/11	Chapter 6: Nomenclature
M	9/14	
W	9/16	<b>Exam 1?</b>
F	9/18	<b>Quiz 4</b>
M	9/21	
W	9/23	Chapter 7: Chemical Formula Relationships
F	9/25	<b>Quiz 5</b>
M	9/28	
W	9/30	Chapter 8: Chemical Reactions
F	10/2	<b>Quiz 6</b>
M	10/5	
W	10/7	Chapter 9: Chemical Change
F	10/9	<b>Exam 2</b>
M	10/12	
W	10/14	Chapter 10: Quantity Relationships in Chemical Reactions
F	10/16	<b>Quiz 7</b>
M	10/19	
W	10/21	Chapter 16: Solutions
F	10/23	<b>Quiz 8</b>
M	10/26	
W	10/28	Chapter 14: Gases
F	10/30	<b>Quiz 9</b>
M	11/2	
W	11/4	<b>Exam 3</b>
F	11/6	Chapter 11: Atomic Theory
M	11/9	
W	11/11	Veterans Day- no class
F	11/13	<b>Quiz 10</b>
M	11/16	
W	11/18	Chapter 12: Bonding; Course Review; Last Day of Regular Classes

Final Exam week: Thursday, 11/19-Wednesday, 11/25:

**Final Exam: Date/Time to be announced. This will be a comprehensive final exam, meaning all material from the course will be covered to some extent. Put this on your calendar now!**