

General Chemistry (CHEM 111)

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What Isn't Chemistry?



Chemistry is a Central Science

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Chemistry

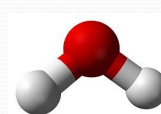
- Science of matter and the changes that it undergoes
- The composition, structure, properties, and reactions of matter, especially of atomic and molecular systems
- Mutual attraction



Matter



Change



structure



Energy



Light

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Resources Are Available!

- Stop by during office hours
- **TA office hour / OWL assignment help (see Moodle)**
 - Eva Liao, yliao@umass.edu
- The Learning Resource Center
 - **SI (supplemental instruction) sessions**
 - ExSEL groups
 - Free tutoring

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LRC-Learning Resource Center: Students helping Students Achieve Academic Success

Who we are:

The Learning Resource Center (LRC) is UMass Amherst's flagship academic and research support office. The LRC offers a peer-supported environment to help students meet academic challenges, achieve academic excellence, and obtain research opportunities.

Learn More:

Email: lrc@acad.umass.edu

Web: www.umass.edu/lrc/

OR stop by the 10th floor of the W.E.B. du Bois library!

The LRC is home to four distinct programs:

- SI (Supplemental Instruction)
- ExSEL: (Excellence through Student Enhanced Learning)
- Peer Tutoring
- OURS (Office of Undergraduate Research & Studies)



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Supplemental Instruction for Chem 111

- SI leader:
 - Mikayla Coolidge, Email: mikaylacooli@umass.edu
 - Avantika Manikandan, Email: amanikandan@umass.edu
- SI Sessions are....
 - Two 75-minute review sessions a week. Additional Exam review session near exam times.
 - Free!
 - Optional
 - Come and go anytime

Time of SI sessions will be announced next week!

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Grading

- The percentage breakdown for the course is as follows:

Graded Assignment	% towards Grade
OWL	18
Laboratory	17
iClicker	5
eExams (3) + Final eExam	60
Total	100



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Course Materials


- Access code to all course material should be purchased via Books by eCampus, access code will be delivered to your digital bookshelf in your eCampus MyAccount.
- Detailed instructions on how to create your OWL account: <https://owl.umass.edu/techsupport/accesscodes/genchem.html>
- OWL Book: General Chemistry, Vinning, W.J., Young, S.M., Day, R. and Botch, B.; Brooks/Cole 1st Ed., 2014. ISBN: 978-1-285-41899-5
- **OWL Account**
 - For textbook, homework, exams
- **Moodle** (<https://umass.moonami.com>)
 - Syllabus, lecture video, lecture slides, announcements
- Scientific calculator

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Course Materials: iClicker




- **Register your iClicker (instructions on Moodle)**
- Bring your iClicker to each class along with spare batteries
- In order to receive credit for the iclicker questions, you must be present and answer the iClicker questions
- *Students are only allowed to answer questions on their own i>clickers (the i>clicker that each student registered for this class); allowing other students to answer questions with your i>clicker, or answering questions on any i>clicker other than your own are both considered academic dishonesty.*
- I will drop 20% of the iClicker points ($\approx 20\%$ extra credit)
- **Please do not come to class if you are feeling unwell.** The participation component of the class has been structured so that you may miss several classes without penalty or loss in credit. Please reach out to me via email if you need to miss class for an extended period of time.

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Course Materials: iClicker



iClicker registration:

- Students will need to create an iClicker Student account to register their remotes, see this link for instructions: https://umass.service-now.com/kb_view.do?sysparm_article=KB0011820

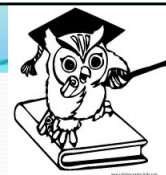
use the same NAME and EMAIL that you use for Moodle!

- then click on this link to enroll in our class:
<https://join.iclicker.com/OWPG>

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Course Materials: OWL



- You must log into OWL for assignments and due dates
- You will have as many opportunities before the due date as necessary to get the questions correct
- Each correctly answered question will get you 1 point
- **due one week from the day that the chapter is completed (exception: the last chapter due on the last day of class)**
- extensions on 3 entire chapter assignments, no exceptions
- Log into OWL on a daily basis to check due dates

use the same NAME and EMAIL that you use for Moodle!

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Course

My Courses

Course Home

Announcements

Course Grades

Clicker Registration

Add/Switch Course

Assignments

Assignment List

Assignment Calendar

Communication

Send Message

View Messages

My Account

Miscellaneous

Appendix

Units of Measure

Student Documentation

Gen Chem eBook

Gen Chem PDF

Unstarted Assignments | **Current Assignments** | **Assignment Calendar** | **All Assignments**

Past Assignments

Course: Chem 111 Spring 2020 - 01 & 02 - Section 01 (40505) & 02 (40506) Moodle - Qin 10:16 AM

☐ Show only required assignments.

Requirement Status	Assignment	Due Date	Your Score
R	OWLBook 1.1 What is Chemistry?	1/23/2020 11:59 PM	not started
R	OWLBook 1.2 Classification of Matter	1/23/2020 11:59 PM	not started
R	OWLBook 1.3 Units and Measurement	1/23/2020 11:59 PM	not started
R	OWLBook 1.4 Unit Conversions	1/23/2020 11:59 PM	not started
R	Section 4.1 Mastery	1/31/2020 11:59 PM	not started
R	Section 1.2 Mastery	1/31/2020 11:59 PM	not started
R	Section 1.3 Mastery		
R	Section 1.4 Mastery		
R	Chapter 1 Review Problems		
R	Chapter 1 Challenge Problems		
O	Math 1a: Exponent Algebra	5/1/2020 11:59 PM	not started
O	Math 1b: Exponent Calculations	5/1/2020 11:59 PM	not started
O	Math 1c: Scientific Notation Using a Calculator	5/1/2020 11:59 PM	not started
O	Math 2: Basic Algebra	5/1/2020 11:59 PM	not started
O	Math 5a: Base 10 Logarithms	5/1/2020 11:59 PM	not started

Only required assignments will count towards grade, not the optional assignments

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OWL eBook Questions Marked "R" are NOT counted towards OWL assignment grade

Page: 1.1 What Is Chemistry?

Navigation Menu
Table of Contents

Student Documentation
Gen Chem eBook
Gen Chem PDF

This section introduces you to **chemistry**: the study of matter, its transformations, and how it behaves. We define **matter** as any physical substance that occupies space and has mass. Matter consists of atoms and molecules, and it is at the atomic and molecular level that chemical transformations take place.

Section Outline
1.1a The Scale of Chemistry
1.1b Matter

Although it is marked "R", OWL book questions are NOT required!

? **R** 0.0 of 1.0 Question: Opening Exploration 1.1: Levels of Matter

Piece of native Cu

STM image of copper atoms on a silica surface

© Cengage Learning/Charles D. Wilens

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Electronic Exams (eExams)

EXAMS	Total Points	Date	Exam description	Location	Time
Exam 1	100	Wed, 10/2	Same format as OWL questions	ISB 155-160	Evening exam
Exam 2	100	Wed, 10/30	Same format as OWL questions	ISB 155-160	Evening exam
Exam 3	100	Wed, 12/4	Same format as OWL questions	ISB 155-160	Evening exam
<u>Final</u>	100	Fri, 12/13	Same format as OWL questions	ISB 155-160	Check spire

For exams 1, 2, and 3, the specific time slots are:

6:00pm - 7:10pm; 7:20pm - 8:30pm; 8:40pm-9:50pm

You are required to select only 1 of the above time slots to take the exam.

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Laboratory



- See: <https://genchem.chem.umass.edu> for required materials for the laboratory portion of the course
- The lab has its own OWL assignments, contact lab instructor
- All questions regarding the laboratory should be directed to your lab TA or laboratory supervisor Professor Thomas Whelan

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Cheating

- Not allowed.
- *Students are only allowed to answer questions on their own i>clickers (the i>clicker that each student registered for this class); allowing other students to answer questions with your i>clicker, or answering questions on any i>clicker other than your own are both considered academic dishonesty.*
- Refer to the university “Academic Honesty” policy <http://www.umass.edu/honesty/>

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Attention!

- You must take all exams to pass this course
- You must have a grade of C- or better in this course (CHEM 111) to take CHEM (112)

Dates to remember

- The last day for withdrawal **without a W** (no record)
 - 9/9/2024
- The last possible day to drop **with a W**
 - 10/29/2024

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Tips to Succeed in CHEM 111

- When you do not know, **Ask**
- Use multiple resources
- Read textbook before coming to class
- Review notes the same day after lecture
- Complete OWL assignments on time
- Be able to solve OWL questions without the help of the hint
- Believe in yourselves



Chem-is-try

I will try my best to help you succeed in this course

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Levels of Success



What are the learning habits of an **A** student?

C- student: What is the answer?

Able to solve problems that are familiar

B-student: How do you do this?

Able to explain formulas, and their use in familiar problems

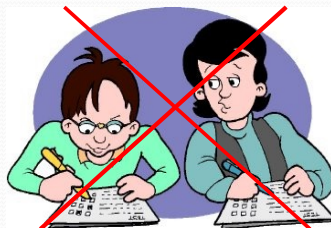
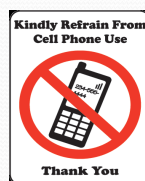
A-student: Am I thinking about this correctly?

Able to analyze new information and select formulas to provide explanations and make predictions (connecting the dots)

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Class Etiquette and Rules



**MASKS
ARE
WELCOME.**



**WE ENCOURAGE EVERYONE
TO RESPECT THE CHOICES THAT
INDIVIDUALS WILL MAKE ABOUT
THEIR OWN MASKING.**

UMassAmherst
umass.edu/coronavirus

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Homework

- **READ SYLLABUS**
- Register your iClicker2 remote
- Complete syllabus quiz on Moodle (only 1 attempt)
- Go over information posted on Moodle
- Complete Chapter 1 video, log into OWL, start reading Chapter 1 and working on OWL assignments

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