

Announcements – Lecture I – Tuesday, Jan 23rd

1. **iClicker for Credit:** Starts, Thursday, Feb 1st
Register your iClicker in Owl by Friday, Jan 26th.
2. **Lab:** Labs start on Monday, Jan 29th.
3. **Exam Dates:** Saturday, Feb 24th:
Session I, 1:00-3:00pm – ISB 155/160
Session II, 3:00-5:00pm – ISB 155/160
Saturday, Mar 31st:
Session I, 1:00-3:00pm – ISB 155/160
Session II, 3:00-5:00pm – ISB 155/160
Thursday, May 3rd: 1:00-3:00pm – ISB 135





University of Massachusetts General Chemistry



TA CRC
Hours

Fall	Spring	Summer
Chem 110		
Chem 111	Chem 111	Chem 111
Chem 112	Chem 112	Chem 112
Chem 121	Chem 122	

3367395

OWL
Spire

CRC
Registrar

Chemistry Dept
Continuing Ed

Moodle
TA Evaluations

Lab Waiver
UMail

<https://genchem.chem.umass.edu>



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Chem 112

Instructors:



Tom Whelan

ISB 241E, 545-6092

whelan@chem

Office Hours

MW, 2:45-4:15 - [ISB 162](#)

1. [Class Meets](#): TuTh 11:30-12:45
2. [Class Location](#): ISB 135
3. [Campus Map](#)

Acknowledgement



Prof. William Vining at SUNY Oneonta, many of his interactive modules I have links to on this web page. To see a host more of these and find out what Bill was up to in the picture on the left ... just click on the image!

Spring 2016

Required Materials:

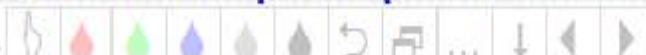
Textbook:

You need to purchase an access code to view the online textbook and to do the class homework. The code is NOT sold through Amazon. See link below to purchase:

1. [Access Code Purchase Information](#)
2. [Safety Glasses](#):
3. [Scientific Calculator](#)
(Easy to use and inexpensive)



General Chemistry Labs: Ground floor of the ISB





Access Codes for General Chemistry

Important: The following information is valid only for those taking Summer 2015 courses. Students in Fall 2015 courses should check back after August 7th.

About Access Codes

Access codes are required for the OWL Gen Chem 111 and 112 courses. Access includes the online eBook. Codes are valid for either 6 or 24 months. If you buy the 6-month code for CHEM 111, you will still need to buy another 6-month code for CHEM 112 to make it through two full semesters. A 24-month code is less expensive for those students who will take both CHEM 111 and CHEM 112 within 24 months of purchase.

- Instead of purchasing an access code right away, you can start by using the 14-day free trial. This is especially helpful if you are not certain whether you'll take the course. See **Using Your Access Code or the 14-Day Free Trial** below.

Purchasing Your Access Code

You MUST purchase your access code from the CengageBrain ecommerce site listed below. Codes purchased elsewhere will NOT work.

1. If you would like to use the **14-day free trial** before purchasing an access code, skip to **Using Your Access Code or the 14-Day Free Trial** below.
2. Go to the [CengageBrain](#) ecommerce site for UMass Amherst general chemistry.
3. Choose one of the following:
 - For a 6-month access code,
Add to Cart: "Custom Instant Access Code for OWL General Chemistry at UMass Amherst - 6 Months, 1st Edition".
 - For a 24-month access code,
Add to Cart: "Custom Instant Access Code for OWL General Chemistry at UMass Amherst - 24 Months, 1st Edition".
4. Follow the CengageBrain instructions to complete your purchase.
5. Your access code will be displayed online as well as sent to the email address you supplied.



Using Your Access Code or the 14-Day Free Trial

1. Get into OWL from the [login page](#) or by clicking the link in your Moodle course.
2. If you are not on the **OWL Access Code Submission** page for your CHEM 111 or CHEM 112 course, click **My Courses** on the left, and choose the correct course.
3. Enter your purchased access code or click the box to use the 14-day free trial.
Note: The free trial can only be used once per person for either CHEM 111 or CHEM 112. If the checkbox is not available, you've previously used your free trial.

Course

My Courses
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Add/Switch Course

Assignments

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[Assignment Calendar](#)

Communication

Send Message
View Messages
My Account

Miscellaneous

Course: [Chem 111 Fall 2014 - 01 - Section 01 \(73668\) Moodle - Voigtman](#)

Your Product Information:

Product Name	CHEM 111
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Enter Access Code

- This product requires an access code.
- Follow the instructions below to obtain one.
- After obtaining your access code, enter it in the form below.

Instructions

Go to <http://owl.cs.umass.edu/techsupport/accesscodes/genchem.html> for instructions.

Enter your access code here:

Access Code	<input type="text"/>
<input checked="" type="checkbox"/> Use 14-day free trial (for new registrations only).	

4. Click **Continue**.
5. You should be on the **Course Home** page.





OWL User Login

OWL Login

[Login](#)

[Login Help](#)



Online Web Learning

University of Massachusetts Amherst Courses - Amherst, Massachusetts
Chemistry General

Login:

Use your NetID

Password:

Use your NetID password

LOG IN

You may safely bookmark this page.





OWL Access Code Submission

Course

Course: [Chem 111 Fall 2014 - 01 - Section 01 \(73668\) Moodle - Voigtman](#)

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Your Product Information:

Product Name	CHEM 111
Expiration Date	9/3/2014 3:52 PM

Enter Access Code

- Follow the instructions below to obtain a new access code for this product.
- After obtaining your access code, enter it in the form below.

Instructions

Go to <http://owl.cs.umass.edu/techsupport/accesscodes/genchem.html> for instructions.

Enter your access code here:

Access Code	<input type="text"/>
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4. Note: If your free trial has already expired, you will be taken directly to the **OWL Access Code Submission** page when you try to access your course.
5. If you have not yet done so, purchase an access code.
6. Enter your purchased access code.
7. Click **Continue**.
8. You should be on the **Course Home** page.



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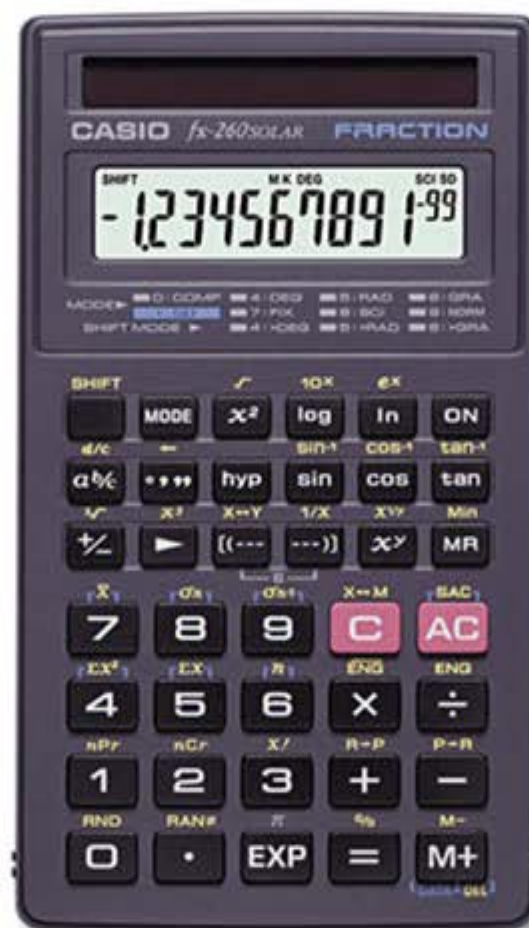
[E-1](#) [E-2](#) [E-3](#)

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[Prelab Quiz](#)

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Syllabus Summary:

1. Grading

3 Exams	66%	Highest Exam Score 24%; Lowest 20%; Other 22%
Quizzes	8%	These are open book take home quizzes ~weekly.
Owl + iClicker	8%	
Laboratory	18%	

2. Exam Policies:

You must have a passing exam average in order to pass the course - Failing two of the exams constitutes a failing exam average. An F will be determined by the exam average and if you fail an exam this will be noted in the Owl Grade Book and on the exam itself.

3. Lab Policies:

Lab Meets every other week, starting Monday, January 29.
You must complete all of the laboratory experiments to pass the course.

4. Academic Honesty:

You will abide by the academic honesty policy of the campus. I expect you to do your own work on exams and labs. You must flush all calculator memories of any chemistry information before coming to an exam. You MAY NOT bring any additional materials to exams other than a pencil, calculator, and your brain. I take honesty very seriously.

5. Grade Cutoffs:

>90's A. <55 F

The other grade cutoffs will be determined at the end of the semester. However if you want to be assured of a B you should be in the 80's and 70's for a C.

6. Exam Dates:

Exam I	Saturday	Feb 24	ISB 155/160	1:00-3:00pm	3:00-5:00pm
Exam II	Saturday	Mar 31	ISB 155/160	1:00-3:00pm	3:00-5:00pm
Exam III	Thursday	May 03	ISB 135	1:00-3:00pm	

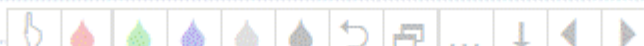
} *

7. Quizzes

Exam I		Exam II		Exam III	
Quiz 1	Key 1	Quiz 5	Key 5	Quiz 8	Key 8
Quiz 2	Key 2	Quiz 6	Key 6	Quiz 9	Key 9
Quiz 3	Key 3	Quiz 7	Key 7	Quiz 10	Key 10
Quiz 4	Key 4				

8. Exams

2018	Exam I	Key I	Exam II	Key II	Exam III	Key III
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Wed LR LS
Fri LU LV
Experiments
Notebook

Date	Daily Schedule ... Updated Sunday, January 22 :- 01:55 PM
Thursday Jan 26 Lecture 2 Slides ↓ After each class	Lecture Material: 11.4 The Nature of Intermolecular Forces <ul style="list-style-type: none"> - 8.6: Chem 111 Review - Bond Polarity - 8.6: Chem 111 Review - Molecular Polarity - Intermolecular Forces - Ion/Ion - Coulomb's Law - Intermolecular Forces - Ion/Dipole - The Dissolution Process - Intermolecular Forces - Dipole/Dipole - Intermolecular Forces - Dipole/Dipole - Hydrogen Bonding - Intermolecular Forces - Dipole/Induced Dipole <p>→ Owl book reference</p> <p>Homework: OWL Book 11.4 The Nature of Intermolecular Forces 01-31-17 Mast 11.4 The Nature of Intermolecular Forces 01-31-17</p> <p>Announcements: 1. iClicker - For Credit starts Thursday, Jan 28. Register your iClicker in Owl by Friday, Jan 22. 2. Lab - Labs start on Tuesday, Jan 26.</p>
Tuesday Jan 24 Lecture 1 Slides	Lecture Material: Course Policy and Expectations! - Lab Announcements 11.4 The Nature of Intermolecular Forces - 8.6: Chem 111 Review - Bond Polarity Homework: OWL Survey iClicker Registration 01-27-17 Intro 1a Navigation, Messages, and Browsers 01-27-17

Projected coverage!



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General Chemistry Lab Waiver Form

For: General Chemistry 110, 111, and 112 only

If your Spire record shows that you received an “F” in the course previously, YOU MUST REPEAT THE LAB along with the lecture.

Your previous lab grade is recommended to be above “80” to use the lab waiver.

Name: _____

Spire ID #: _ _ _ _ _

Email address _____@umass.edu

Lecture (5 digit number) _ _ _ _ _

In lieu of retaking the lab portion of
(choose one) Chem 112 this
(choose one) Summer 201 ,



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Wed	LR	LS
Fri	LU	LV
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Notebook		
E-1	E-2	E-3
E-4	E-5	E-6
Prelab Quiz		
E-1	E-2	E-3
E-4	E-5	E-6

} all lab material ... view prior to your first lab.

} Experiments ... print prior to your lab.

} → Sample prelab quizzes.



Chem 112

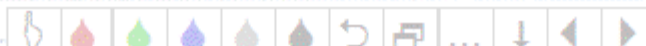
There are no Lab Owls associated with Chem 112 Lab.

February

2018

Monday	Tuesday	Wednesday	Thursday	Friday
			1	2
				2:30 - 5:30 Section L07 - 99LU Exp 1
Add/Drop 5	6	7	8	9
2:30 - 5:30 Section L02 - 99LM Exp 1	8:15 - 11:15 Section L04 - 99LQ Exp 1	2:30 - 5:30 Section L06 - 99LS Exp 1		2:30 - 5:30 Section L08 - 99LV Exp 1
12	13	14	15	16
2:30 - 5:30 Section L01 - 99LL Exp 2	8:15 - 11:15 Section L03 - 99LN Exp 2	2:30 - 5:30 Section L05 - 99LR Exp 2		2:30 - 5:30 Section L07 - 99LU Exp 2
President's Day 19	20	21	22	23
	8:15 - 11:15 Section L04 - 99LQ Exp 2	2:30 - 5:30		2:30 - 5:30

January February March April May



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Laboratory

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Grading:

Important Summary:

1. In order to receive a grade in the course you must receive a laboratory grade. Fail the laboratory portion and you fail the entire course, regardless of how you do in lecture. In order to obtain a laboratory grade you must complete ALL the laboratories (see frequently asked question).
2. The laboratory grade constitutes ~~20%~~ ^{18%} of the overall course grade.

Grading within the Laboratory Program:

A final laboratory grade will be posted at the end of the semester before your final exam. This grade is based on the following

Prelab Quiz	25%
Laboratory Notebook	70%
TA Assessment	5%

11.4 The Nature of Intermolecular Forces

8.6 – Molecular Polarity – Chem 111 Review! – Bond Polarity

Requirement: All you need is a polar covalent bond. That is a bond in which the constituent atoms have different electronegativities.



C-O bond is polar, difference in electronegativity between C and O. Oxygen is more electronegative than carbon.

$:\text{N}\equiv\text{N}:$ N-N bond is non-polar. No difference in electronegativity.

