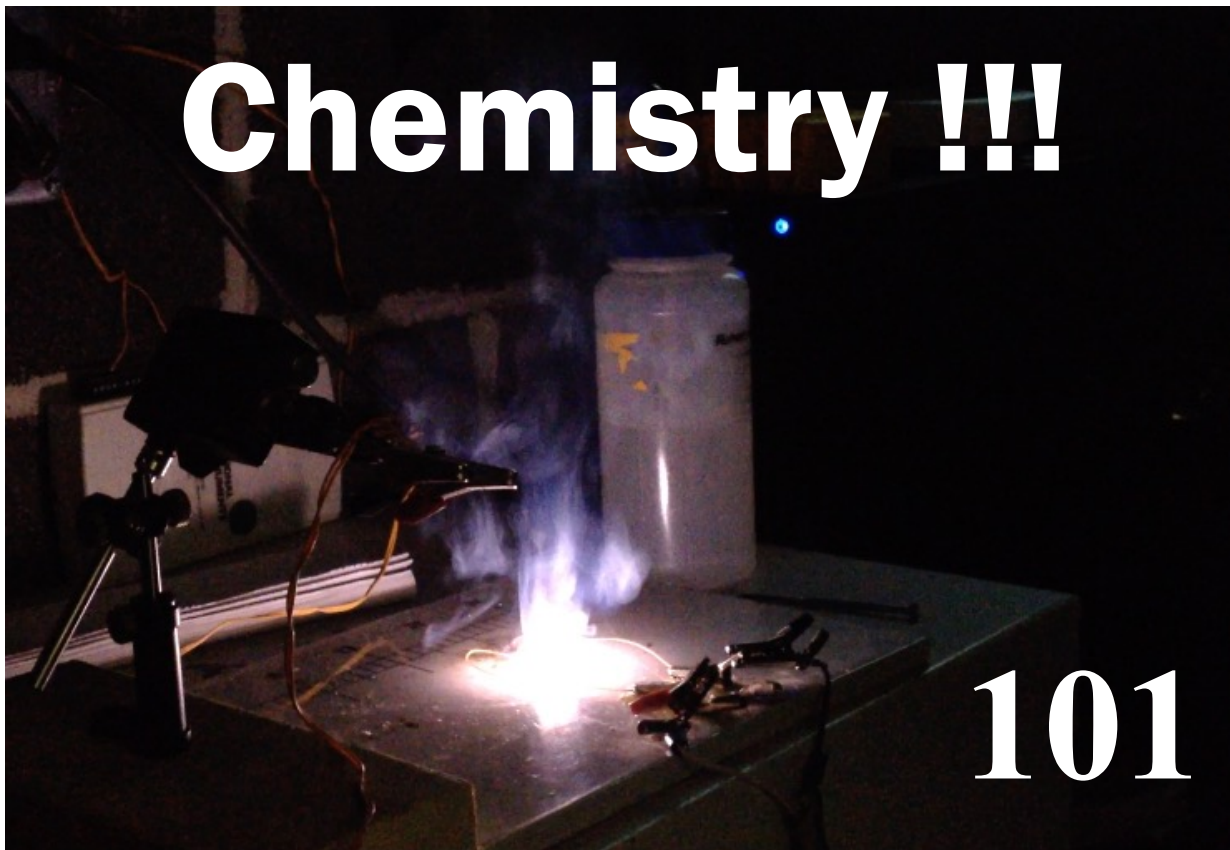


Chemistry !!!



101

Fall 2023

Dr. Maria A. Donnelly
Beaupre 117C
madon@uri.edu

Why Learn Chemistry?

To better understand the environment around us

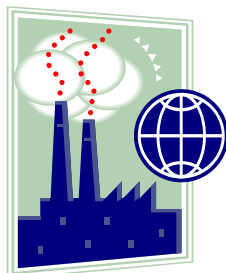


Medicine

- Understanding disease
- Develop new drugs

Environmental Science

- Ozone layer
- Global warming
- Acid rain



Agriculture

- Bioengineered food
- Fertilizers

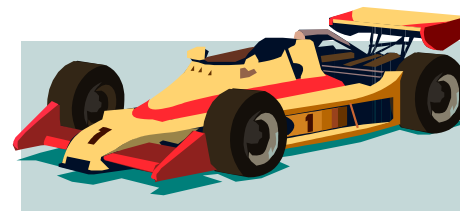
Criminal Justice & Safety

- Forensics
- Explosives & Drug detection
- Safety equipment



Material Science

- Better built houses
- More efficient cars
- Plastics, composites



Why Learn Chemistry?

Fun!

Fireworks!



New materials for sports equipment!



Better electronic devices & gaming systems!



High tech clothing for any activity!



Course Organization & Expectations

CHM101 – Freshman Chem. Lecture (lab – CHM102)

- First half of 2 semester general chemistry sequence
- Required if need 3–4 semesters of chemistry for your major
- Pharmacy, Engineering, some Biology & Environmental Science majors, Pre–professional programs (medical, dental, veterinary etc.)
- **Emphasis on mathematical skills (esp. algebra) & problem solving** (most exams at least 80% math)
- Other General Chemistry courses – 103, 191
- If you think you may be enrolled in the wrong course, let me know right away

Labs Start Wednesday 9/6
Experiments Start Tuesday 9/12

Safety Training is required for all Chem. Labs

You must complete the required on-line lab safety module before the second lab session or you will not be able to participate in that lab – CHM 102 has only ONE make-up lab!

This first week, your TA will cover important information about safety training and lab & department policies. If you missed lab this week, try to attend another session in your normal lab room today or tomorrow.

See the Start Here module in your CHM 102 Brightspace site for more information.

Course Organization & Expectations

Required Materials

- Book: Chemistry: Atoms First 4th edition
 - By Julia Burdge & Jason Overby
 - Published by McGraw Hill
 - Can use either paper or electronic
- Access to Connect online homework
 - Smart Book assignments
 - Homework assignments
- Scientific calculator
- Brightspace/URI email
 - Gradebook
 - Announcements
 - Some additional assignments
 - Links to course resources
- Many course resources can also be accessed through <https://www.chm.uri.edu/index.php/misc-user-page/?buttonname=miscbutton&person=mdonnelly&topicname=CHM101>



Chapters 1–12

Useful Information: lecture notes, old videos from remote learning, etc. available on course resources site

THE UNIVERSITY OF RHODE ISLAND

DEPARTMENT OF CHEMISTRY

1-401-874-2318 chemistry@etal.uri.edu

Home People ▾ Research For Prospective Students For Current Students Links ▾ Contact Us

Dr. Donnelly's CHM 101 Student Resources

Course Information

- Syllabus
- Beaupre 100 Seating Chart

Connect Information

- General Connect Information
- Registration Information

Lecture Slides

- Intro & Chapter 1
- Chapter 2
- Chapter 3
- Chapter 4

Brightspace



CHM101: General Chemistry Lecture I_0004_FA...



Maria Donnelly
Learner

Course Home

Content

Assignments

Discussions

Quizzes

Classlist

Grades

Class Progress

Course Tools

Help

More

CHM101: General Chemistry Lecture I_0004_FALL22

Updates

D2L Visual TOC

Course Introduction - Start Here!

83% 5 of 6 Topics Completed

Syllabus and Schedule

100% 2 of 2 Topics Completed

Announcements

There are no announcements to display.

Calendar

Monday, September 5, 2022

Upcoming events

There are no events to

Announcements – might need to opt in for emails!

Brightspace

Welcome to CHM 101!

Table of Contents 11

☰ Course Introduction - Start Here! 6

☰ Syllabus and Schedule 2

☰ Link to course content videos and slides 1

☰ Help Is Available!!!

☰ Using the Connect Drawing tool 1

☰ AXE: Additional Support Opportunity 1

Add a module...

CHM 101 is a general chemistry course designed to introduce a variety of concepts and principles that are fundamental to the study of chemistry. Significant emphasis will be placed on mathematical skills and problem solving.


We will go over the information in the introductory presentation on the first day of class, but it is also included here as a reference.







The syllabus provides important information about course policies and requirements. Make sure to read this document carefully and let me know if you have any questions about the content.

The additional documents provide information about textbook/access code purchasing options, the registration link and information for the Connect online homework system that we will be using

Upload / Create ▾

Existing Activities ▾

 Bulk Edit

| | |
|--|---|
| ☰ 2021F_CHM101_IntroductoryPresentation ▾ | ✓ |
|  PDF document | |
| ☰ CHM101_Syllabus ▾ | ✓ |
|  Word Document | |
| ☰ CHM101 Sec4 McGraw Hill Connect Information ▾ | ✓ |
|  PDF document | |
| ☰ ConnectPurchasingInfo ▾ | ✓ |
|  PDF document | |
| ☰ CHM101 Sec4 Connect Registration Details ▾ | ✓ |
|  PDF document | |
| ☰ Connect Registration Link ▾ | ✓ |
|  Link | |

Course Organization & Expectations

Homework

- Homework will be completed and submitted through the McGraw Hill Connect online homework program
- There are two types of homework, one of each per chapter
 - Homework assignments
 - Ten points per question
 - Best to complete after attending lecture on material
 - Can be submitted late automatically with 2% per day loss of credit
 - Smart Book assignments
 - 100 points each, graded based on completion
 - Assigned toward the beginning of the chapter as an introduction to the material – essentially these are your “read the chapter” assignments
 - Have been set to accept late submissions – if this does not work email me to request an extension
- There will also be **OPTIONAL** practice assignments with additional questions.

Connect Assignments


CHM 101 SEC 4 FALL 2020 - CHM 101 SEC 4 FALL 2020

Assignments

| | | | | | |
|----------|----------------------|--|--------------------------------|----------|---|
| Required | Chapter 1 Smart Book | Start: Sep 9, 2020 at 12:00 AM EDT Due: Sep 14, 2020 at 11:59 PM EDT | CHM 101 Sec 4 Fall 2020 C... | SB | 🔒 |
| | Chapter 1 Homework | Start: Sep 9, 2020 at 12:00 AM EDT Due: Sep 18, 2020 at 11:59 PM EDT | CHM 101 Sec 4 Fall 2020 C... | Homework | 🔒 |
| | Chapter 1 Practice | Start: Sep 9, 2020 at 12:00 AM EDT Due: Dec 31, 2020 at 11:59 PM EST | CHM 101 Sec 4 Fall 2020 C... | Homework | 🔒 |

NOT Required

Read



Burdge, Chemistry: Atoms First, 4e
Julia Burdge, 4e

To read ebook

Questions in Smart Book assignments are required. All questions must be answered to receive full credit.

Concepts

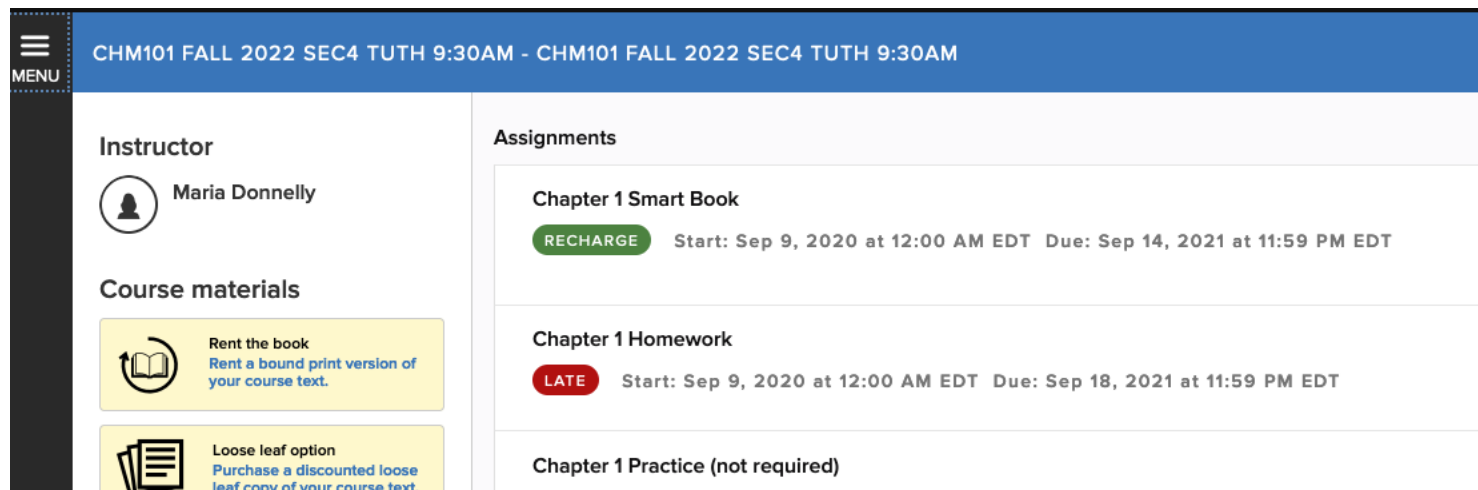
1.1 THE STUDY OF CHEMISTRY

Chemistry often is called the *central science* because knowledge of the principles of chemistry can facilitate understanding of other sciences, including physics, biology, geology, astronomy, oceanography, engineering, and medicine. **Chemistry is the study of matter and the changes that matter undergoes.** Matter is what makes up our bodies, our belongings, our physical environment, and in fact our entire universe. **Matter** is anything that has mass and occupies space.

Chemistry You May Already Know

You may already be familiar with some of the terms used in chemistry. Even if this is your first chemistry course, you may have heard of *molecules* and know them to be tiny pieces of a substance—much too tiny to see. Further, you may know that molecules are made up of *atoms*, even smaller pieces of matter. And even if you don't know what a *chemical formula* is, you probably know that H₂O is water. You may have used, or at least heard, the term *chemical reaction*; and you are undoubtedly familiar with a variety of common processes that are chemical reactions, such as those shown in [Figure 1.1](#). Don't worry if you are not familiar with these terms; they are defined in the early chapters of this book.

To Questions



CHM101 FALL 2022 SEC4 TUTH 9:30AM - CHM101 FALL 2022 SEC4 TUTH 9:30AM

Instructor
 Maria Donnelly

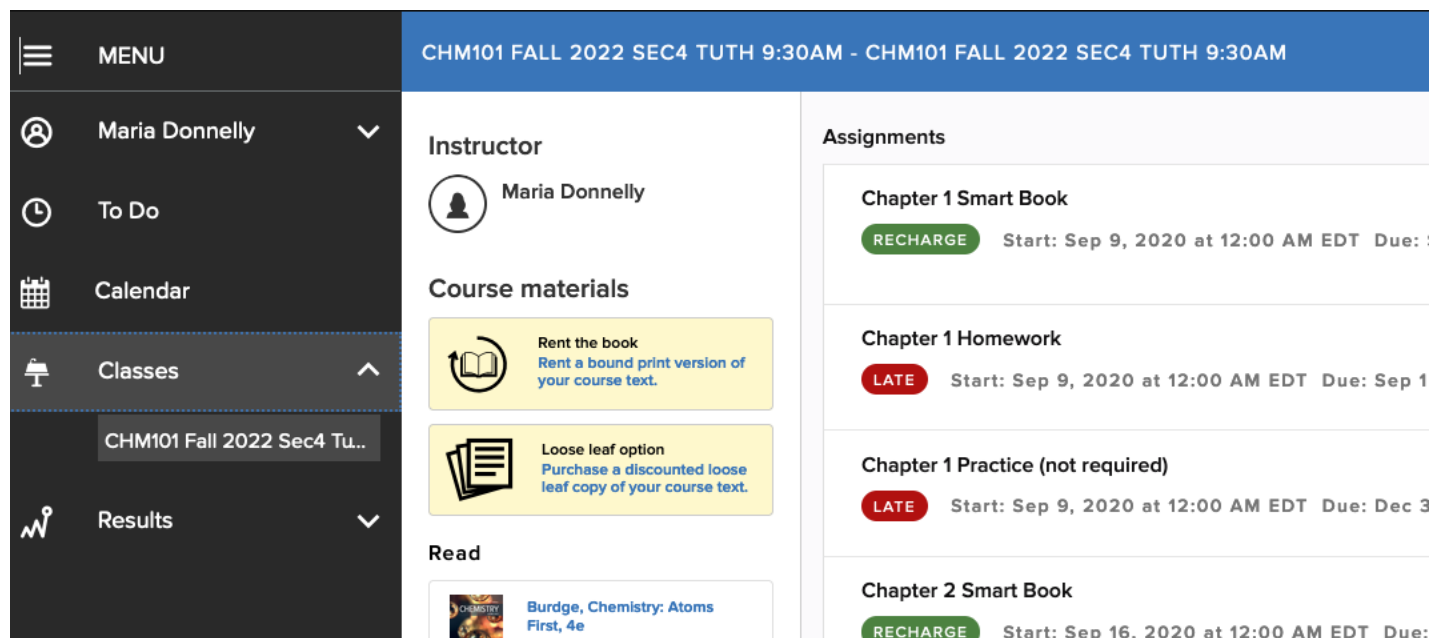
Course materials

- Rent the book
Rent a bound print version of your course text.
- Loose leaf option
Purchase a discounted loose leaf copy of your course text.

Assignments

- Chapter 1 Smart Book
RECHARGE Start: Sep 9, 2020 at 12:00 AM EDT Due: Sep 14, 2021 at 11:59 PM EDT
- Chapter 1 Homework
LATE Start: Sep 9, 2020 at 12:00 AM EDT Due: Sep 18, 2021 at 11:59 PM EDT
- Chapter 1 Practice (not required)

To get to full list of assignments (rather than just those with due dates in the near future).



MENU

CHM101 FALL 2022 SEC4 TUTH 9:30AM - CHM101 FALL 2022 SEC4 TUTH 9:30AM

Maria Donnelly

To Do

Calendar

Classes

CHM101 Fall 2022 Sec4 Tu...

Results

Instructor
 Maria Donnelly

Course materials

- Rent the book
Rent a bound print version of your course text.
- Loose leaf option
Purchase a discounted loose leaf copy of your course text.

Read

Burdge, Chemistry: Atoms First, 4e

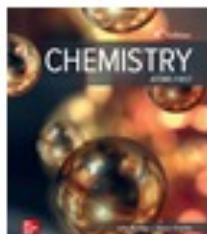
Assignments

- Chapter 1 Smart Book
RECHARGE Start: Sep 9, 2020 at 12:00 AM EDT Due: :
- Chapter 1 Homework
LATE Start: Sep 9, 2020 at 12:00 AM EDT Due: Sep 1
- Chapter 1 Practice (not required)
LATE Start: Sep 9, 2020 at 12:00 AM EDT Due: Dec 3
- Chapter 2 Smart Book
RECHARGE Start: Sep 16, 2020 at 12:00 AM EDT Due: :

Connect Registration

Registration Information
is section specific!

CHM101 Fall 2023 Sec4 TuTh 9:30am



Burdge, Chemistry: Atoms First, 4e

Burdge, 4e

CHM101 Fall 2023 Sec4 TuTh 9:30am

Registration info: 09/01/23 - 12/12/23

There is a link to your section's registration page in Brightspace.

Connect Registration

Welcome

Need help? [Contact customer service](#) →

CHM 101 SEC 4 FALL 2020
CHM 101 SEC 4 FALL 2020



INSTRUCTOR
MARIA DONNELLY



CHEMISTRY: ATOMS FIRST
JULIA BURDGE, 4TH ED.

Enter your email to join this class:

By using this site you agree to the [Terms of Use](#) and [Privacy Notice](#).

BEGIN →

Create your McGraw-Hill account.

Email Address

Confirm Email Address

Password

Confirm Password

Passwords are case sensitive and must contain 8-20 characters including: 1 uppercase character, 1 lowercase character and 1 number. (No spaces)

First Name

Last Name

Security Question

Security Answer

We'll ask you this question to retrieve your password.

Mobile Number
(optional, [get important text alerts](#))

I agree to the terms of the McGraw-Hill [Terms of Use and Privacy Notice](#).

CONTINUE



Instructor:
Maria Donnelly



Burdge: Chemistry: Atoms First
4TH EDITION
Julia Burdge

Student Registration



General Chemistry: The Essential Concepts
ISBN:0077623290
Edition:7
Author:Raymond Chang, Kenneth Goldsby

What you get with Connect:

- Digital Access to the textbook
- Interactive tools that will help you focus your study time
- Exclusive discounts on a print copy of the textbook

Already purchased?

To access your course materials, first enter your 20 digit registration code.

Registration Code:

Example: GRFU-BYHA-6MYJ-FGAK-F9XA

Submit

[How do I register](#) | [What is a registration code](#)

Need to purchase?

No registration code, no problem. You can buy access to General Chemistry: The Essential Concepts right now. All you need is a credit card.



Buy Online

Need Temporary Access?

You can get two week access to your course materials. After that your work will be archived and you can purchase access.

Start courtesy access

A two week courtesy access is available if you cannot immediately purchase an access code.

Register & start work right away!

(Older screenshot, looks a little different now)

Course Organization & Expectations

Exams

- Exams will be held in Beaupre 100 at the scheduled class time.
 - Dates are in the syllabus and the schedule in this presentation
- You will be assigned a seat for your exams
 - When you arrive, your exam will be waiting for you at your seat with your name on it
 - Leave your bag at the front, take your calculator and something to write with, and begin your exam
- Calculators with advanced functions (able to read pdf files, access the internet, etc.) cannot be used on exams.
- There will be four in-class exams and one final exam
 - To eliminate the need for make-up exams, if you miss an in-class exam, your final will count twice in place of the missed exam.
- If you feel there is an error in the grading of your exam, you must bring this to my attention within 48 hrs of the graded exam being returned to you. No grade changes will be considered after this time

General Course Schedule

| Chapter | Title | Week/Date |
|---|--|--------------------------------------|
| 1 | Chemistry: The Science of Change | 1-4 |
| 2 | Atoms & the Periodic Table | |
| 3 | Quantum Theory & The Electronic Structure of Atoms | |
| 4 | Periodic Trends of the Elements | |
| Exam 1 | Chapters 1-4 | Tuesday Oct. 3rd |
| 5 | Ionic & Covalent Compounds | 5-7 |
| 6 | Representing Molecules | |
| 7 | Molecular Geom., Intermolec. Forces, & Bonding | |
| Exam 2 | Chapters 5-7 | Thursday Oct. 26th |
| 8 | Chemical Reactions | 8-11 |
| 9 | Chemical Reactions in Aqueous Solutions | |
| 10 | Energy Changes in Chemical Reactions | |
| Exam 3 | Chapters 8-10 | Thursday Nov. 16th |
| 11 | Gases | 12-14 |
| 12 | Liquids & Solids | |
| Exam 4 | Chapters 11-12 | Tuesday Dec. 12th |
| **Final Exam: Thursday December 14th 8:00 - 10:00am | | |

** Final exam dates are set by the University and are subject to change

Important Fall 2023 Semester Dates:

- Wednesday Sept. 27th – last day to drop courses with no transcript designation of “W”
- Monday Oct. 9th – Columbus/Indigenous People’s Day, classes do not meet
- **Tuesday Oct. 10th – Monday classes meet to make up for Columbus Day**
- Wednesday Oct. 19th – Last day to drop classes in ecampus (after this date, a form is required that must be signed by your Academic Dean)
- Tuesday Oct. 24th – Freshmen Mid-Term grades due at noon
- Monday Nov. 13th – Veterans Day Observed, classes do not meet
- Thursday Nov. 23rd – Sunday Nov. 26th – Thanksgiving Recess
- Tuesday Dec. 12th – last day of classes
- Thursday Dec. 28th – final grades due in ecampus at noon

Course Organization & Expectations

Grading

| | |
|---|-------------|
| Online Homework, Smart Book, & Attendance Quizzes | 15 % |
| 4 Semester Exams* (17 % each) | 68 % |
| Final Exam | 17 % |
| Total | 100% |

- Your final course average will be calculated using the following formula:

$$\text{Course Avg.} = (\text{Homework Avg.} \times 0.15) + (\text{Exam Avg.} \times 0.85)$$

- The homework average includes homework assignments, smart book assignments, & attendance quizzes
 - Each homework assignment counts for a given number of points based on the number of questions
 - Each Smart Book assignment counts for 100 points
 - Each attendance quiz counts for 20 points
 - $\text{HWK Avg.} = (\text{pts. earned} / \text{total \# of pts possible}) \times 100$

Incomplete Policy

Incomplete grades cannot be assigned except in the case of a real emergency. In order to receive an incomplete, a student's **course work must have been passing** and the student **must have completed at least half of the coursework for the semester**. Incompletes should be made up within one year of the semester in which the grade of incomplete was assigned. **If an incomplete is not made up prior to either the two year grade change deadline established by the University, or the student's expected graduation date, whichever is earlier, the "I" will be replaced with a grade calculated for the student based on the work completed and including zeroes for any work not completed.**

Be Courteous to Your Classmates

- If you arrive late/need to leave early, use the back entrance
- Your peers can be a great resource, but please wait till after lecture to talk with them/ask them questions
- Give everyone a chance to answer
- Remember why you are here
 - TV shows, games, movies, & social media will not help you learn
 - they are also visible to the students sitting behind you & can be quite distracting

Getting Help

Make sure to seek help right away if you feel you are struggling with material

- Office hours
 - Use Starfish to sign up for a time (or just stop by!)
 - Starfish appointments should be made 24 hours in advance
 - Beaupre 117C is in the corridor inside room 115
 - Appointments are not required, but those with appointments receive priority for their scheduled time.
 - Can also email questions
- Chemistry department TAs also hold office hours
 - Held in Beaupre 115
 - Can ask any 102 TA for help
 - Also three CHM 101 TAs
 - Audreyana, Maddy, & Subarna
 - Link to the TA office hour schedule will be posted in Brightspace as soon as it is available.
- AEC also offers tutoring (www.uri.edu/aec)

I am happy to help!!!



Your choices will determine your level of success

- **Attendance is important**
 - prepare in advance – become familiar with key terms & ideas
 - pay attention, ask me questions
 - print out slides and bring them with you to take notes on
- **Assignments are designed to help you learn**
 - focus on WHY you need to follow certain steps to solve problems rather than trying to memorize the steps
 - ask yourself what you do and do not understand
- **Complete assignments on time**
 - mastery of early material will help with material covered later
 - avoid having assignments build up & losing points due to lateness
- **Seek help right away!**
 - office hours
 - TAs in Beaupre 115 Learning Center
 - AEC tutoring group or walk in tutoring