

Chemistry !!!



101

Fall 2024

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Why Learn Chemistry?

To better understand the environment around us

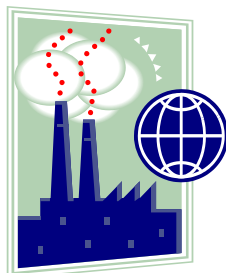


Medicine

- 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!

3

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 9/4
Experiments Start Tuesday 9/10

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 5th edition
 - By Julia Burdge & Jason Overby
 - Published by McGraw Hill
 - Can use either paper or electronic
- Access to Aleks online homework
 - Chapter Intro 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

THE UNIVERSITY OF RHODE ISLAND

CHM101: General Chemistry Lecture I_0004_FA...

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

 Overview

 Bookmarks


 Course Schedule

Table of Contents **17**

Course Introduction -
Start Here! **2**

Instructor Information

Syllabus and Schedule **2**

Link to course content
videos and slides **1**

Help Is Available!!!

Extra Practice **12**

Link to Aleks Login
(Homework) ✓

AXE: Additional
Support Opportunity

Welcome to CHM 101!


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

 Download

 50 % 2 of 4 topics complete

[CHM101_IntroductoryPresentation](#) ▼

 PDF document

[CHM101_Syllabus](#) ▼

 PDF document

[Aleks Class Code is DYVRW-DVGLT](#) ▼

 PDF document

[Aleks Student Registration Instructions](#) ▼



Course Organization & Expectations

Homework

- Homework will be completed and submitted through the McGraw Hill Aleks online homework program
- There are two types of homework, one of each per chapter
 - Chapter Intro Assignments
 - An introduction to the chapter – questions on basic information such as key terms
 - "Read the chapter" assignments
 - Due before or near the start of each chapter
 - Homework assignments
 - Ten points per question
 - Best to complete after attending lecture on material
- Chapter Intro & Homework assignments are graded the same way
 - Ten points per question
 - Can be submitted late automatically with 1% per day loss of credit

Aleks Registration

https://www.aleks.com/highered/math/HE_Student_Registration_No_Access_Code.pdf

Aleks Class Code for Fall 2024: DYVRW-DVGLT
Class Name: CHM 101 Sec 1 TuTh 9:30am

Student Registration Instructions

Before you begin, you will need a **10-character Class Code**.

For assistance during registration, please contact ALEKS Customer Support at <http://support.aleks.com>.

Step 1: Go to www.aleks.com and select **SIGN UP NOW!** under the Registered Users box.

Step 2: Enter the 10-character class code provided by your instructor and click **Continue**.

Step 3: Verify your enrollment information. If it is incorrect, check your class code and click on **(Modify)** to make any corrections. If your information is correct, click on **Continue**.

Aleks Registration

https://www.aleks.com/highered/math/HE_Student_Registration_No_Access_Code.pdf

Aleks Class Code for Fall 2024: DYVRW-DVGLT
Class Name: CHM 101 Sec 1 TuTh 9:30am

Step 4: Select whether or not you have used ALEKS before and click on **Continue**.

If you have used ALEKS before, you will be prompted to enter your existing login and password.
You can retrieve your login information by clicking on **I forgot my login information**.



The screenshot shows the ALEKS registration interface. At the top, there is a navigation bar with the ALEKS logo and a 'HOME' link. Below the navigation bar, a progress bar indicates the current step: 'ACCOUNT STATUS'. The main content area is titled 'WELCOME TO ALEKS!' and asks 'Have you used ALEKS before?'. There are two radio button options: 'I have never used ALEKS before or I do not have an ALEKS login name.' and 'I have an ALEKS login name.' (which is selected). Below these options is a section titled 'Account Information' with two input fields: 'Your ALEKS login name:' and 'Password:'. A link 'I forgot my login information' is located below the password field. At the bottom, there is a red 'CONTINUE' button.

Step 5: If you entered your existing ALEKS account information in Step 4, you will be prompted to verify your email address at this time.

Otherwise, complete the registration steps to create a new ALEKS account and click on **Continue**.

A confirmation email will be sent to the email address you provided.

IMPORTANT: Be sure to save your new login information!

Step 6: Once your registration is complete, you will be in your ALEKS class and can begin with the Answer Editor Tutorial. Please see Appendix B to learn more about managing your ALEKS account.

Aleks Assignments

Will make you go through a tutorial and a knowledge check when you first enter the course site.

ALEKS® CHM 101 Sec 1 TuTh 9:30am - Sec 1

Hi, Maria !

UP NEXT
Solving for a variable in terms of other variables in a linear equation wit...

START MY PATH

WORKING TOWARD
Class Progress
105 of 233 Topics
Due Dec 20 11:59 PM

Pre-chapter Assignment 1
Questions: 10
Due Friday 11:59 PM
Opens Wednesday 12:00 AM

[View Assignment List](#)

To get to ebook

Mastered: 105 Learned: 0 Remaining: 128

45%

Math and Physics (41 Topics)
Measurement and Matter (41 Topics)
Atoms, Ions and Molecules (27 Topics)
Chemical Reactions (42 Topics)
Thermochemistry (17 Topics)
Electronic Structure and Chemical Bonding (46 Topics)
States of Matter (15 Topics)
Acids and Bases (4 Topics)

To get to assignments

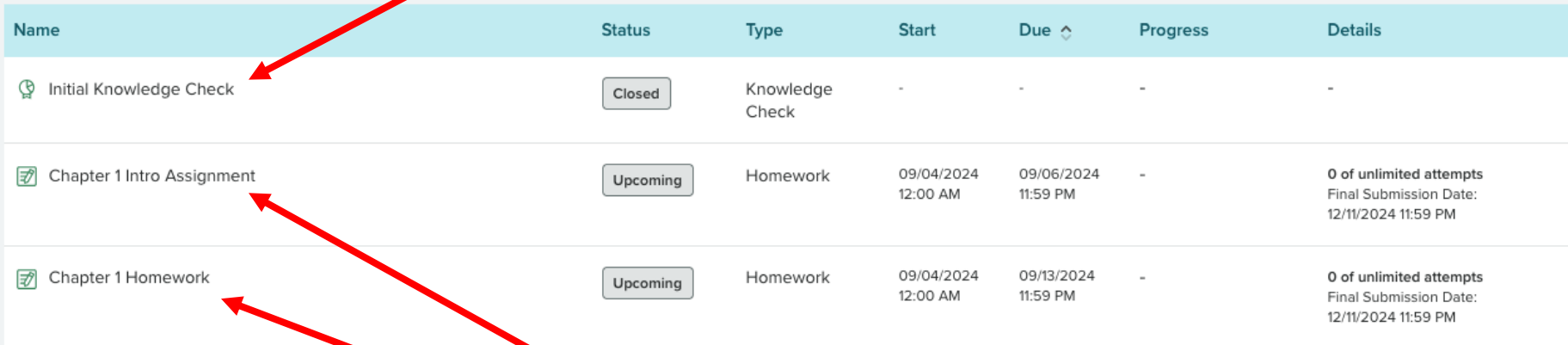
Calendar ALEKS Pie Detail




Aleks Assignments

Will make you go through a tutorial and a knowledge check when you first enter the course site.

Not part of grade but
program requires it.

Assignments



Name	Status	Type	Start	Due	Progress	Details
 Initial Knowledge Check	Closed	Knowledge Check	-	-	-	-
 Chapter 1 Intro Assignment	Upcoming	Homework	09/04/2024 12:00 AM	09/06/2024 11:59 PM	-	0 of unlimited attempts Final Submission Date: 12/11/2024 11:59 PM
 Chapter 1 Homework	Upcoming	Homework	09/04/2024 12:00 AM	09/13/2024 11:59 PM	-	0 of unlimited attempts Final Submission Date: 12/11/2024 11:59 PM

Graded assignments.
Will be one of each for
each chapter.

Aleks eTextbook

Clicking on the box of lines opens the menu on the left

The screenshot displays the ALEKS interface for a chemistry course. The left sidebar contains a menu with the following items: Home, Learn, Review, Assignments, Worksheet, Calendar, Gradebook, Reports, Message Center, Textbook, ALEKSPedia, and Tell me more about ALEKS. The main content area is divided into three sections: 'UP NEXT' with a preview of a problem on solving linear equations and a 'START MY PATH' button; 'WORKING TOWARD' showing class progress (105 of 233 topics mastered, due Dec 20 11:59 PM); and a 'Pre-chapter Assignment 1' section with 10 questions due Friday 11:59 PM, opening Wednesday 12:00 AM. A 'View Assignment List' link is at the bottom. On the right, a sunburst chart shows progress by topic, with a central '45%' indicator. A legend on the far right lists topics: Math (41 Tc), Mea (41 Tc), Aton (27 Tc), Chei (42 Tc), Ther (17 Tc), Elec Boni (46 Tc), State (15 Tc), and Acid (4 To).

Home

Learn

Review

Assignments

Worksheet

Calendar

Gradebook

Reports

Message Center

Textbook

ALEKSPedia

Tell me more about ALEKS

ALEKS® CHM 101 Sec 1 TuTh 9:30am - Sec 1

UP NEXT

Solving for a variable in terms of other variables in a linear equation wit...

START MY PATH

WORKING TOWARD

Class Progress

105 of 233 Topics

Due Dec 20 11:59 PM

Pre-chapter Assignment 1

Questions: 10

Due Friday 11:59 PM

Opens Wednesday 12:00 AM

View Assignment List

Mastered: 105 Learned: 0 Remaining: 128

45%

Math (41 Tc)

Mea (41 Tc)

Aton (27 Tc)

Chei (42 Tc)

Ther (17 Tc)

Elec Boni (46 Tc)

State (15 Tc)

Acid (4 To)

Click on Textbook to access the ebook.

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
 - There will be four in-class exams and one final exam
- 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.
- 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.

Missed Exams

- 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.
 - Make-up exams generally do not help students, so this policy is strongly recommended.
- If you will miss an exam for a school sanctioned event you must contact me in advance. You are eligible to take the exam in the Testing Center, but date options are limited so advance notice is required. Without advance notice, the final will count twice.
- Official documentation is required to request a make-up exam.
 - Documentation must explicitly cover the date of the exam and must state that the student is UNABLE to attend class on that date.
 - Health Services stated policy is that they do not provide doctors notes.
 - Per the University Manual, make-up exams must be requested within 7 calendar days of the absence. Requests must be made in writing via email and must include appropriate documentation.
 - All make-up exams will be held on the last day of classes (Wednesday 12/13) so that all students can take their make-up on the same day.
 - Make-up exam cancellations must be made via email no later than one week before the make-up exam date.
 - If you request a make-up exam but do not show up to take the make-up exam, you will receive a zero for that exam.
 - A second missed exam will require University documentation.

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. 1st
5	Ionic & Covalent Compounds	5-7
6	Representing Molecules	
7	Molecular Geom., <u>Intermolec.</u> Forces, & Bonding	
Exam 2	Chapters 5-7	Thursday Oct. 24th
8	Chemical Reactions	8-11
9	Chemical Reactions in Aqueous Solutions	
10	Energy Changes in Chemical Reactions	
Exam 3	Chapters 8-10	Thursday Nov. 14th
11	Gases	12-14
12	Liquids & Solids	
Exam 4	Chapters 11-12	Tuesday Dec. 10th
**Final Exam: Thursday December 19th 8:00 – 10:00am		

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

Important Fall 2024 Semester Dates:

- Wednesday Sept. 25th – last day to drop courses with no transcript designation of “W”
- Monday Oct. 14th – Columbus/Indigenous People’s Day, classes do not meet
- **Tuesday Oct. 15th – Monday classes meet to make up for Columbus Day**
- Friday Oct. 18th – Last day to drop classes in ecampus (after this date, a form is required that must be signed by your Academic Dean)
- Friday Oct. 25th – Freshmen Mid-Term grades due at noon
- Tuesday Nov. 5th – Election Day, classes do not meet
- Wednesday Nov. 6th – **Tuesday classes meet to make up for Election Day**
- Monday Nov. 11th – Veterans Day, classes do not meet
- Wednesday Nov. 27th – Sunday Dec. 1st – Thanksgiving Recess
- Wednesday Dec. 11th – last day of classes
- Friday Dec. 27th – final grades due in ecampus at noon

Extended Course Schedule

Date	Day	Chapters & Assignments
9/2	M	
9/3	Tu	
9/4	W	
9/5	Th	Intro & CH 1
9/6	F	CH 1 Intro Assignment due
9/9	M	
9/10	Tu	CH1
9/11	W	CH 2 Intro Assignment due
9/12	Th	CH 1 & CH 2
9/13	F	CH 1 HW due
9/16	M	CH 3 Intro Assignment due
9/17	Tu	CH 2 & CH 3
9/18	W	CH 2 HW due
9/19	Th	CH 3 & CH 4
9/20	F	
9/23	M	CH 4 Intro Assignment due
9/24	Tu	CH 4
9/25	W	CH 3 HW due
9/26	Th	CH 4
9/27	F	
9/30	M	CH 4 HW due
10/1	Tu	Exam 1: CH 1 – 4
10/2	W	
10/3	Th	CH 5
10/4	F	
10/7	M	CH 5 Intro Assignment due
10/8	Tu	CH 5
10/9	W	
10/10	Th	CH 5 & CH 6
10/11	F	CH 5 HW due
10/14	M	Columbus/Indigenous People's Day
10/15	Tu	No Class: Monday classes meet
10/16	W	CH 6 Intro Assignment due
10/17	Th	CH 6 & 7
10/18	F	CH 6 HW due

Date	Day	Chapters & Assignments
10/21	M	CH 7 Intro Assignment due
10/22	Tu	CH 7
10/23	W	CH 7 HW due
10/24	Th	Exam 2: CH 5 – 7
10/25	F	
10/28	M	CH 8 Intro Assignment due
10/29	Tu	CH 8
10/30	W	
10/31	Th	CH 8 & CH 9
11/1	F	CH 8 HW due
11/4	M	CH 9 Intro Assignment due
11/5	Tu	No Class: Election Day
11/6	W	Tuesday Classes Meet!!! CH 9
11/7	Th	CH 9
11/8	F	
11/11	M	Veterans Day
11/12	Tu	CH 9
11/13	W	CH 9 HW due
11/14	Th	Exam 3: CH 8 – 9
11/15	F	
11/18	M	CH 10 Intro Assignment due
11/19	Tu	CH 10
11/20	W	
11/21	Th	CH 10
11/22	F	CH 11 Intro Assignment due
11/25	M	CH 10 HW due
11/26	Tu	CH 11
11/27	W	Thanksgiving recess
11/28	Th	No Class: Thanksgiving
11/29	F	Thanksgiving recess
12/2	M	CH 12 Intro Assignment due
12/3	Tu	CH 11 & 12
12/4	W	CH 11 HW due
12/5	Th	CH 12
12/6	F	CH 12 HW due Mon 12/9
12/10	Tu	Exam 4 Chapters 10-12

Note that homework due dates may change – see Aleks for the most current due dates.

Course Organization & Expectations

Grading

Online Chapter Intro & Homework Assignments & 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 the Chapter Intro & Homework assignments on Aleks & attendance quizzes
 - Each Chapter Intro & Homework assignment counts for a given number of points based on the number of questions. Each question is worth 10 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 will only be assigned 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 within two years, or prior to the student's expected graduation date or departure from the University, 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.**

According to the University manual, arrangements to resolve an incomplete must be made by the midsemester following the semester in which the incomplete was received (for undergraduates). **If a student fails to make such arrangements, the incomplete may be changed as early as the end of the semester following the semester in which the incomplete was received.**

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

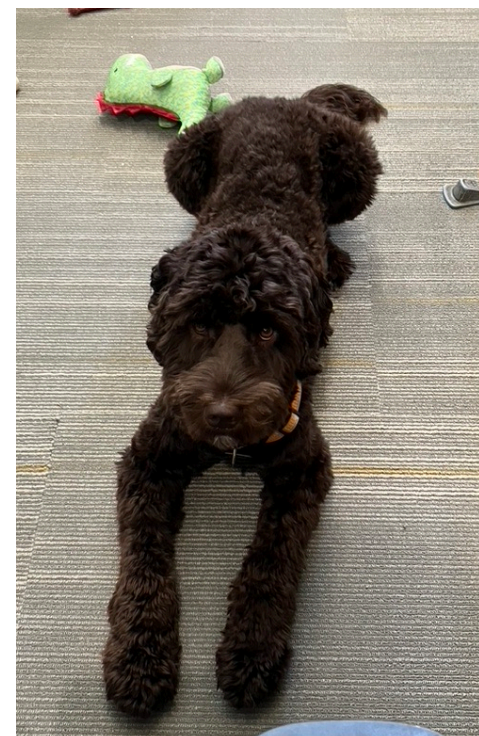
Continued enrollment in this class indicates that you understand and agree to the course policies as described in the syllabus.

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 two CHM 101 TAs
 - Maddy & Maggie
 - 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