



Course Information and Polices

Honors Chemistry 2009–2010

Instructor
Email

Mr. Xu Duan
xduan@queenanne.org

Class Location
Help Hours

Science Building Room. 3
By appointments

Course Objectives

Welcome to Honors Chemistry! In this course you will start with the Atomic Theory of Matter and build up your knowledge and insights into various complex chemical reactions and processes impacting many aspects of our daily life. Designed to the students with high motivation and a strong mathematical skill, the course will take a rigorous and aggressive approach addressing various central topics in general inorganic and basic organic chemistry with strong integrations of quantitative analysis and weekly hands-on experience. You will have ample chance to practice your mind with problem solving, busy your hands with laboratory experimentations, and challenge your intellect with integrated projects. The ultimate goal of this course is to prepare you to matriculate into the ensuing Advanced Replacement Chemistry. At the end of the year, the entire class will prepare for and participate in annual statewide chemistry team championship – the Chemathon.

$$SUCCESS \begin{matrix} \xrightarrow{\text{dynamic}} \\ \xleftarrow{\text{equilibria}} \end{matrix} \left[\frac{\text{listening} \uparrow^3 + \text{practicing} \uparrow^2 + 4 \times \text{exmperirmenting} \uparrow}{\sqrt[0.5]{\text{less_exposure} \downarrow}} \right]^{\text{WillPower}}$$

Honors Events

Honors students, as a whole class, will participate in various essential events on program, department, school, state, and/or national levels throughout the year. These events are aimed at building up your confidence, knowledge, skills, as well as offering you broader exposure and perspectives in Chemistry. The pertinent works assigned from these events are evaluated and factored into your grade.

It is required that the ENTIRE Honors class prepare for the state-wide chemistry competition, the Chemathon, which requires some regular off-the-class trainings from early January to late April in 2010. The 26th Chemathon is scheduled on the last Saturday of April at University of Maryland, College Park, on April 24, 2009.

Major Events: Honors Chemistry 2009–2010

	Event	Scale	Date	Comments
2009	Equation Balancing Race	Inter-class	Mid-Oct.	<ul style="list-style-type: none"> • Joining AP Chemistry class • Equal to one test
	The MOLE Day Celebration	Program	Oct. 23	<ul style="list-style-type: none"> • Poster-gearred to all school • Supervised by AP class • Joining General Chemistry classes • Equal to a project
2010	Crystal Growing	Program	Jan. to April	<ul style="list-style-type: none"> • Chemathon prelude • Embedded in a lab
	Chemathon Competition	All state	April 25	<ul style="list-style-type: none"> • Joining AP class • Joining 30+ other schools • Embedded in labs
	U.S. National Chemistry Olympiad (possible)	National	Late March to Mid-April	<ul style="list-style-type: none"> • Joining AP class • Joining 30,000+ across the nation
	Chemistry & Food Project	General & Honors classes special	Late-May	<ul style="list-style-type: none"> • Joining the General classes • Supervised by AP class • Preparation for Biology • Equal to one project

Regular Course Activities and Evaluations

Certain activities – such as a lab report, a project and a test – might be assigned or occur concurrently although always with different due days. You therefore need to coordinate your schedule to suitably complete these tasks.

Course Evaluation: Honors Chemistry 2009–2010

	TYPE	%	FREQUENCY	COMMENTS
QUARTER	Quiz	15	<i>2-3/ per week</i>	<ul style="list-style-type: none"> • 10 minutes - previous day material • may drop the lowest 2
	Unit Test	40	<i>3-4</i>	<ul style="list-style-type: none"> • an entire class period • non-accumulative: from the current unit
	Lab Work & Project	30	<i>Weekly</i>	<ul style="list-style-type: none"> • lab worksheet in lab manual • lab report
	Homework & Class-work	15	<i>Daily & weekly</i>	<ul style="list-style-type: none"> • homework assigned by lecturing unit & by package • class-work assigned as worksheet
SEMESTER	Exams: Midterm or Final	20	<i>1</i>	<ul style="list-style-type: none"> • 2 hours including a lab practical • accumulative
	Field Trip	Lab	<i>1</i>	<ul style="list-style-type: none"> • part of the lab grade

Homework & Lab Work RE-DO

Timely completion of homework or a lab work with good quality is vital for your continuing survival and ultimate success in this course. The procedure delineated below is designed to help you to achieve this goal.

Grading-holding & RE-DO in Homework:

For a homework or a lab work which is usually worth 100 points, timely turning-in the work with all the questions attempted will warrant you 70 points (late work grading scheme is abide by the policy by the Science Department).

Up to 30 points (out of 100) of a single homework or a lab report turned in (timely and thorough) might be held due to poor quality and presentation. A RE-DO, however, will raise your grade based on the following:

Points Held	Presentation & Quality	RE-DO	Maximum Points Raised After RE-DO
0	<i>Adequate</i>	<i>NA</i>	<i>NA</i>
10	<i>Acceptable</i>	<i>Recommended</i>	8
20	<i>Poor</i>	<i>Recommended</i>	15
30	<i>Unacceptable</i>	<i>Must</i>	20

- A RE-DO must be handed in within 2 days after the returning of the homework with the original one attached
- A RE-DO may only address the questions/parts where the points are withheld
- Failing to turn in 2 must RE-DOs will result in an interim

Things Impeding Quality Homework and Lab Work/Manual

- Not turning it in on time
 - ❖ Homework: 100% off after its due
 - ❖ Lab work: one third off each day after its due
 - ❖ Redo work: 100% off after its due
- Any 'Guerrilla-war' type presentation – unconventional and under-trained – such as
 - ❖ Visually messy
 - ❖ Logically messy: rumbling & incoherent
 - ❖ Too many unnecessary intermediate (computational) steps
 - ❖ Too few steps to show the logic connections
 - ❖ Missing data and/or analyses
 - ❖ No apparent verbal links between adjacent (computational) steps
 - ❖ No final unit(s)
 - ❖ No appropriate significant numbers
 - ❖ Not answering what essentially is asked for and/or using the wrong method
 - ❖ Not following the comments and capitalizing the chance of RE-DO

Personal Supplies for Lectures & Labs

Supply Check-list: What do you need daily in Honors Chemistry?

ITEMS	USAGE	CHECKED??
An inquisitive mind	<ul style="list-style-type: none"> • every moment in this challenging course 	<input type="checkbox"/>
★Textbook	<ul style="list-style-type: none"> • daily reading • in class reference • homework 	<input type="checkbox"/>
Laboratory Manual	<ul style="list-style-type: none"> • lab work & exercise • homework • reference 	<input type="checkbox"/>
★One three-ring binder	<ul style="list-style-type: none"> • handouts including lecture guides • assignments • all tests / quizzes/ exams 	<input type="checkbox"/>
A scientific calculator: TI-83 or greater	<ul style="list-style-type: none"> • quantitative problem-solving 	<input type="checkbox"/>
A deck of index cards	<ul style="list-style-type: none"> • flash-cards for vital equations, reactions and concepts 	<input type="checkbox"/>
A handful highlighters	<ul style="list-style-type: none"> • class activities • daily reading 	<input type="checkbox"/>



Textbook

Chemistry:
Introductory Chemistry:
A Foundation
by Steven S. Zumdahl
6th Edition

★Notes

Three-ring Binder

Designated only for Chemistry with sections clearly labeled. Since materials will accumulate 'explosively', good organization will carry you a long way.

Grading Policies

Honors Chemistry Grade Determination (by QAS)

Accumulative % Grade	Corresponding Letter Grade
Above 92	A
90-92	A-
87-89	B+
83-86	B
80-82	B-
77-79	C+
73-76	C
70-72	C-
67-69	D+
63-66	D
60-62	D-
Below 60	F

Occasions Affecting Grades & Actions to Take

Occasion	Effects on Grade	Remedies & Recommendations
Inexcusable late work	<ul style="list-style-type: none"> • Homework: 100% off after its due • Lab report: one third off each day after its due • Redo work: 100% off after its due 	<ul style="list-style-type: none"> • turning in your work and RE-DO on time
Tardiness	Huge – missing the most critical course daily announcement and keynotes of the lecture	<ul style="list-style-type: none"> • be on time • lunch detention & grade deduction
Excusable late work – short absence	None if complying with Remedy & Recommendation	<ul style="list-style-type: none"> • must see the instructor on the 1st day of return • may turn in the work late as many days as the absence • must start making-up missed labs on the 1st day of return
Excusable late work – long absence	In theory, none if complying with the Remedy & Recommendation. <i>AVOID LONG ABSENCE – Or you will have great difficulty to catch-up!</i>	<ul style="list-style-type: none"> • must see the instructor on the 1st day of return to workout a <i>Timeline</i> • may turn in the missed following an approved <i>Timeline</i> by the instructor
Classroom misconduct	May result in expulsion and bring cascading drops of the grade	<ul style="list-style-type: none"> • behavioral modification/improvement • detention and/or expulsion