

# Enriched Chemistry Course Syllabus 2020-2021

## Contact Information:

Mr. Groff

email: [Quinn.Groff@ankenyschools.org](mailto:Quinn.Groff@ankenyschools.org)

515-965-9630 (ext.) 57564

## What You Are Going to Learn

SCI.CHEM.01 Students will infer the structure and predict the properties of an atom.

SCI.CHEM.02 Students will infer the structure and predict the interactions of a substance based on the substances properties.

SCI.CHEM.03 Students will use mathematical proportions to support mass conservation.

SCI.CHEM.04 Students will predict the properties of a substance based on the energy (due to motion or position of particles) of the system.

SCI.CHEM.05 Students will analyze a problem and design, test and evaluate a solution to that problem.

Students will be able to:

1. analyze the properties of different substances based on molecular structure.
2. evaluate how the structure of an atom affects its properties and stability.
3. evaluate the bonding that occurs between elements to form compounds.
4. apply the appropriate nomenclature for different types of compounds.
5. analyze chemical reactions to predict the outcome of reactions.
6. analyze the relationships between pressure, volume, temperature, and moles of a gas when solving problems.
7. analyze the formation of solutions and reactions that occur in solutions.

In addition, Enriched students are expected to:

1. Problem-seek and problem-solve
2. Participate in scholarly and creative processes
3. Use imagination
4. Critically analyze and apply
5. Learn to express/defend ideas
6. Learn to accept constructive criticism
7. Become a reflective thinker
8. Become an initiator of learning

The format of the course allows you to meet these standards.

## Course Outline:

Semester 1:

- Atomic Structure and the periodic table
- Chemical Reactions
- Molecular structure and properties

Semester 2:

- Conservation of mass
- Rates of Reactions
- Energy change in chemical reactions

## Required Materials:

***Being prepared is important for success in any class.*** Bring the following with you each day:

- A composition notebook (preferably quad-ruled) to use as a lab notebook
- Pencils
- Black/blue pens and pencils
- Calculator (TI-30X or higher)
- Colored pen (for modifying thinking)
- High-lighter

## Textbook:

Modern Chemistry (Sarquis)

**You will not be assigned a textbook for Chemistry class.** Instead, we will use a classroom set for in-class work.

**Online textbook access:** my.hrw.com

username: ankenychemistry

password: chemistry

## Instructor's Schedule:

Periods 7 and 8: Physics

Periods 2, 4E, 5E, and 6: Enriched Chemistry

Third lunch

Period 3: PLC Collaboration/Planning

Period 1: Planning

If you need help, I am available before school, during my planning periods, or after school. Please be aware that if you need help, Enriched Chemistry does not necessarily follow the same course schedule as regular Chemistry. Your best bet is always to set up a time to meet with me, rather than one of the other teachers. I'm pretty flexible and willing to work with students, so come see me!

## Assessment and Grading:

**Formative Assessment:** Formal and informal processes teachers and students use to gather evidence for the purpose of improving learning.

**Summative Assessment:** Assessments that provide evidence of student achievement for the purpose of making a judgment about student competence or program effectiveness.

In accordance with standards-based grading, our assessments are tiered based on skill proficiency, rather than a points-based system. Student assessments are tiered and graded using proficiency scales.

- Students must demonstrate understanding at the 65 level on **all standards** in order to pass the course, regardless of their final percentage grade in the class.
- Summative assessments are tiered (65, 75, 88, 100). Students must demonstrate proficiency in the lower levels before they can earn a higher level grade.

### How students will be graded:

- Letter grades will continue to be assigned for all courses at the secondary level based on the 0-100 percent scale.
  - Levels will be assessed multiple times, all levels will be reassessed, and most recent score replaces the previous score. This encourages retention of the most basic concepts.
  - Failure to meet understanding at the 65 level will be entered as 37.5 in infinite campus.
  - Rubrics are provided for each essential learning so students clearly know what concepts and skills they need to know to get the desired level of understanding.

## Academic Integrity

All students are expected to commit to high standards of personal and academic integrity. Students are expected to do their own work and document sources appropriately.

## Grading Scale:

Letter Grade:	A	Letter Grade:	C
Minimum Percent:	92.5	Minimum Percent:	72.5
Letter Grade:	A-	Letter Grade:	C-
Minimum Percent:	89.5	Minimum Percent:	69.5
Letter Grade:	B+	Letter Grade:	D+
Minimum Percent:	86.5	Minimum Percent:	66.5
Letter Grade:	B	Letter Grade:	D
Minimum Percent:	82.5	Minimum Percent:	62.5
Letter Grade:	B-	Letter Grade:	D-
Minimum Percent:	79.5	Minimum Percent:	59.5
Letter Grade:	C+	Letter Grade:	F
Minimum Percent:	76.5	Minimum Percent:	59 and below

**90% of your course grade is determined by performance on assessments and other assignments that will be used as evidence of proficiency on the standards.**

**10% of your course grade is determined by a Semester Exam.**

**Important!** All summative assessments (quizzes and tests) must be completed before you can receive a grade for the course!

### **Multiple and Varied Assessment Opportunities (including Retakes)**

Students will have multiple assessment opportunities to demonstrate higher levels of achievement. The opportunities may be initiated by the instructor or the student, but always at the instructor's discretion. Additional opportunities may include retakes of an alternate form of an assessment (e.g., Form B instead of Form A), student revisions of work products based on descriptive feedback, or alternative methods of assessments (e.g., an oral response rather than a written test).

Specific guidelines are the following:

- Students will be provided the opportunity to be reassessed (i.e., retakes and homework).
- Teachers determine appropriateness and authentic need for reassessments.
- Generally, reassessments will be limited to one retake per assessment. Additional reassessments will be provided at the discretion of the teacher. While a retake is encouraged by the teacher, it is ultimately a student's decision whether or not to participate in the retake.
- Retakes will be taken within a reasonable time frame that the teacher determines and informs students of in advance. This typically means retakes of an essential learning **must** be completed before the next essential learning's 100 level assessment.

***In this course, the main summative assessments include quizzes and unit tests. Your scores on these assessments will make up 80% of your grade.***

You may have the opportunity to retake all or part of a quiz or unit test. Each retake is subject to the guidelines mentioned above. Before a retake can be done, the student must meet with the teacher at least once outside of class and, in most cases, do some extra practice work.

### **Homework and Independent Practice:**

Homework is an opportunity for students to practice skills, apply knowledge, review and build on past learning, and extend learning. Homework is individualized and based on each student's progress towards established standards. The purpose of the assignment will determine whether or not a grade is given and will be clearly articulated to students. Through independent learning tasks (homework), students assume more responsibility for their learning and are given opportunities to apply what they have learned to new situations or experiences.

There are four main purposes for independent learning tasks:

- Purpose 1: Building fluency;
- Purpose 2: Applying knowledge;

- Purpose 3: Reviewing and practicing past learning; and
- Purpose 4: Extending learning across topics and disciplines.

The purpose of an assignment will determine whether or not a grade is given. Independent practice / homework shall be individualized and based on each student's progress towards established standards.

### **Extra Credit and Bonus Points:**

To ensure that grades reflect progress toward and achievement of the standards, *giving extra credit points or bonus points will not occur in this class.*

### **Missing Class**

It is important for you to be in class as much as possible. *Students who do poorly in the class generally do so because they miss too much class.*

If you miss class for some reason, it is your responsibility to talk to instructor and pick up your missed work. For each day missed, you have two days to turn in the assigned homework. Assignments will be posted daily at on instructor's Google Classroom.

If you are absent on the day of a test or quiz, it is your responsibility to see instructor to arrange the soonest possible make-up date and time (generally 2-3 days).

Tests are announced well ahead of time. If you are absent on the "Review Day" before each test, you are expected to take the test on the scheduled day with the rest of the class.

### **Behavioral Expectations:**

The work habits/behavior standards are for grades 6-12 courses in our district. These work habits/behavior standards will be reported throughout the semester and are as follows:

- Organization and Readiness
- Productivity and Accountability
- Collaboration Skills

For those of you accessing this document electronically, the work habits tool can be accessed [here](#). We will be using the following performance levels:

#### **Performance Levels for Work Habits/Behavior Standards:**

**MS** = Meets Standard

**PM** = Partially Meets Standard

**DM** = Doesn't Meet Standard

**NE** = No Evidence

These descriptors are intended for feedback and communication and do not impact a student's GPA.

Behavior expectations for this course:

- attending class
- bringing required materials to class
- participating in all learning activities
- keeping materials updated and organized
- completing in-class and outside-class practice exercises
- exhibiting self-control with your cell phone
- showing respect for the learning of others.
- following lab safety contract

Academic dishonesty will not be tolerated. Any violations will be dealt with in accordance with Ankeny High School policy.

*Cell phones should be left in your locker or silenced and put in the cubbies when class begins and should stay put away until the end of class. Unless instructed to use cellular device for class.*