

**General Chemistry - S404111**  
Grade 10 - 12  
**Highland Park Senior High School**  
**(651) 293-8940**

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### I. Course Summary

Chemistry is a yearlong introductory laboratory course covering the principles of Atomic structure, periodicity, bonding, states of matter, chemical reactions, stoichiometry, and acids and bases. Laboratory investigations, group projects, readings, homework assignments, presentations, papers, and exams are an integral part of this course. Critical thinking and problem solving skills are addressed on a daily basis. The International Baccalaureate (IB) learner profile will be followed.

Throughout the year, we will learn by using real world problems, laboratory experiments, and journals to help students become inquirers, knowledgeable, thinkers, communicators, principled, open minded, risk takers, balanced, caring, and reflective. The standards addressed in this course are the Minnesota Academic Science Standards for 9-12 Chemistry and Selected Nature of Science and Engineering Standards. These standards and benchmarks are covered in the following units.

### II. Units of Study

	<b>Name of unit</b>	<b>Approximate Duration of Unit</b>
Unit 1:	Nature of Science and Engineering	3 weeks
Unit 2:	Matter	4 weeks
Unit 3:	Atomic Structure and The Periodic Table	6 weeks
Unit 4:	Bonding	7 weeks
Unit 5:	The Mole	5 weeks
Unit 6:	Chemical Reactions	5 weeks
Unit 7:	Stoichiometry	6 weeks
Unit 8:	Solutions	3 weeks

### III. Text and Methodology

- I. The science teachers work collaboratively to teach not only chemistry but also life skills such as organization, group participation, critical thinking and reflection. Students should expect to work collaboratively with peers on a daily basis. We will be using the following textbook throughout the course though we do not expect students to carry the book with them daily.
- II. Chemistry Matter and Change by Buthelezi, T., Dingrado, L., Hainen, N., Wistrom, C., Zike, D. (2008) McGraw Hill Glencoe Company

### IV. Methods of Assessment

Students will engage in a summative assessment for each unit, which will show knowledge of the content studied. Examples of summative assessment can include: exams, quizzes, projects, lab reports, essays, and presentations. **Summative assessments will represent 70%** of the total student grade for each semester of the course. Students will also engage in formative assessments for each unit, which will help students develop skills and knowledge, and indicate progress toward the summative assessments given. **Formative assessments will represent 30%** of the total student grade for each quarter of the course. Examples of formative assessment can include: student notebooks, daily assignments, quizzes, and lab activities.

*(Please refer to the "Highland Park Senior High School Grading Policy" for further information).*

## V. Science Notebooks

Students will be expected to maintain an interactive notebook throughout the year. Almost all classroom work including notes, labs and activities will be done in the notebook. Materials will be pasted into the notebook throughout the year. It is expected that this be a composition (bound) notebook for ONLY chemistry and that students bring it to class daily. Formative points will be assigned for complete notebooks.

## VI. iPads and Schoology

Schoology will be used to deliver classroom materials to students. It is expected that students become familiar with how to access Schoology, view course updates and retrieve/turn in work. Digital resources will only be allowed to be accessed on a school issued iPad (NOT a cellphone or other device) so please be sure your iPad is charged and with you daily! Cell phones are not allowed in class during class time. This is a schoolwide policy.

## VII. Absences, Late Work and Re-takes

*Please refer to the "Highland Park Senior High School Grading Policy"*

Tardies are recorded.

## VIII. Additional Classroom Expectations

Class Expectations: *Safe, Respectful, and Responsible*

It is important that each student comes to class on time each day prepared to learn, work hard, participate, help other students, and advocate for him/herself when help is needed. Additionally, it is important to be organized, proactive, mature, and to have a good attitude. In order to have a comfortable classroom environment, it is essential to be respectful to staff, students, property, ideas, and opinions. Please **do not** bring food or drinks (water in a closed container is permitted) into the science classroom. Please no gum! School policies will be followed regarding electronic equipment, attire, inappropriate language, absences, and tardiness.

Materials Needed / Supply List:

Pens (no-gel) and/or Pencils

Composition notebook for **chemistry only** – everything will be secured in this notebook for class and kept in the classroom. Please no five subject notebooks or spiral notebooks!

Pocket folder

Scientific Calculator (graphing calculator **NOT** required)

Extra Assistance:

*It is better to keep up than to catch up!* Students can schedule a help session before or after school when needed.

Cheating, Plagiarizing, Stealing, Etc.:

Cheating, assisting with cheating, plagiarizing (intentionally or unintentionally), stealing, and defacing property are not tolerated and will be dealt with as directed by school policy (see student handbook).

## IX. Chemistry Safety

The following are a list of safety rules which must be adhered to in order to participate in the chemistry classroom. Failure to comply with these rules will result in a three step system as follows:

First Offence: Verbal Warning – Allowed to stay in lab with correction

Second Offence: Written Warning, Parents Informed – Removed from lab for class period, Allowed to return to lab next day, Missed lab day must be made up after school within 3 days

Third Offence: Conference with Admin/Parents – not allowed in lab until this occurs

Please read the following with your parents/guardians. By returning the signed paper at the end of this you stating that you understand and agree to follow these rules when performing lab activities.

### **Whenever performing a chemistry investigation I will:**

1. use the science laboratory for authorized work only.
2. remove contact lenses and wear safety goggles when instructed to do so.
3. study the laboratory investigation before coming to the lab. (If in doubt of any procedure, I will ask my teacher.)
4. know how to use the safety equipment provided and know the location of the fire extinguisher, eye wash station, safety shower, and fire blanket.
5. In case of fire, alert the teacher and leave the laboratory.
6. extinguish all flames before using flammable materials such as alcohol or acetone.
7. place broken glass and disposable materials in their designated containers.
8. report any accident, injury, or incorrect procedure to the teacher at once.
9. never taste, touch, or smell any substance unless specifically directed by the teacher to do so.
10. handle chemicals carefully, check the label of every bottle or jar before removing the contents, and never return unused chemicals to reagent containers.
11. When heating a substance in a test tube, make sure that the mouth of the test tube points away from other people and away from myself.
12. use proper equipment to handle hot glassware.
13. tie back long hair, remove dangling jewelry, roll up loose sleeves, and tuck in loose clothing.
14. at the end of the lab, clean the work area. Wash and store all materials and equipment, and turn off all water, gas, and electrical appliances.

## **I have read the syllabus for chemistry with Ms. Noah**

**(Please complete, sign, and return this page)**

Please access the syllabus through Schoology in the opening week folder. The syllabus contains information about units covered, textbook used, materials needed, class expectations and lab safety rules. Please read it through with your parents/guardians, discuss it, purchase the materials and then sign it together. Please submit the signature page to Schoology.

### **Student**

I have read this document and will do my best to fulfill these expectations.

\_\_\_\_\_  
**Print** Student Name (first and last name)

\_\_\_\_\_  
Class Period

\_\_\_\_\_  
Student Signature (first and last name)

### **Parent/Guardian**

I have read this document and will encourage my student to meet these requirements.

\_\_\_\_\_  
**Print** Parent/Guardian Name(s)

\_\_\_\_\_  
Preferred Phone Number

\_\_\_\_\_  
Parent/Guardian Signature

\_\_\_\_\_  
Parent/Guardian Email