Portage Public Schools
Shaping the Future

Honors Chemistry 2 – Inorganic Chemistry

Instructor	Dan Meyers	Phone	269.323.5207
Room #	**3114**	E-mail	dmeyers@portageps.org
Twitter	@MeyersChemistry	Website	http://dmeyers.site.portageps.org

Course Description:

This semester course follows the chemistry 1 course. It provides further in-depth study of topics in Chemistry 1 and additional topics. Specifically, this course addresses the mathematics involved in chemistry. It includes topics such as: stoichiometry, equilibrium, gas law calculations, acid/base theory, solution concentration, kinetics, thermodynamics, and oxidation/reduction reactions. Together with Chemistry 1 this course provides a full year of comprehensive college-preparatory chemistry and meets the Michigan Merit Curriculum for Physical Science. ***Prerequisite knowledge***: Chemistry 1, Physics 1, solid understanding of algebra.

Essential Learning Expectations:

Students completing the course will be able to apply (in practice or in written form):

- the principles of stoichiometry and mass conservation.
- how solutions are made and the concept of concentration of solutions.
- how equilibrium systems are established and what factors can affect the position of an equilibrium system.
- how pH is calculated and used when describing acids and bases.
- how acids and bases can be defined in multiple ways.
- how the processes of oxidation and reduction describe the movement of electrons in a reaction.
- how electrochemical cells are used to generate a voltage for practical use.
- how to calculate entropy and enthalpy changes and how they can be used to predict the spontaneity of a reaction.
- how the collision theory can be used to predict the effects of changing conditions on chemical reaction rate.
- how the gas laws can be used to calculate the effect of pressure, temperature and volume changes on a gas.

Text and other recommended materials:

Chemistry 2 Course pack, scientific calculator, lab notebook

Evaluation:

Students will be evaluated using the Board approved grading scale on benchmarked assessments throughout the course culminating in a summative exam at the end of the course. The final exam will assess practical lab skills and essential benchmarks as defined by the Michigan Content Expectations in the Michigan Merit Curriculum.

100 - 91.5 = A
91.4 - 89.5 = A-
89.4 - 87.5 = B+
87.4 - 81.5 = B
81.4 - 79.5 = B-

79.4 - 77.5 = C+
77.4 - 71.5 = C
71.4 - 69.5 = C-
69.4 - 67.5 = D+
67.4 - 61.5 = D
61.4 - 59.5 = D-
59.4 - 0 = E

Common Final Exam:

The final exam grade is comprised of three parts. 40% of the grade is based on a multiple choice assessment, 40% of the grade is based on a short answer assessment, 20% of the grade is based on a lab practical (there are 2 lab practicals).

Grading Method:

Grades will be based on the following list:

ITEM	Category weight
Test/quizzes/essays	70% of grade
Lab quizzes and reports	20% of grade
Practice work	10% of grade

Practice work, regardless of the number of problems, will be assigned points as follows:

4 points	At least 90% completed when due
2 points	100% complete but turned in by review day
0 points	Anytime test day or after

All work must be shown to earn credit at any time!

Lab reports will be conducted differently than in the past. Lab reports will be completed using Google Classroom and Google Docs. An assignment will be posted on Google Classroom with a template for the assigned lab. Your task will be to complete the lab report by the due date posted on the agenda board and on the class Google site/calendar. The great thing about Google Classroom is that you will receive relatively quick feedback about your written reports and, hopefully, improve your technical writing skills – skills that will bode well for IB and college chemistry courses. Occasionally, lab quizzes may be given – you will be permitted to use your lab notebook containing your raw data. Late lab reports can be turned in for 50% of earned credit up to three days after the due date.

Please note:

1. **NO EXTRA CREDIT** will be offered at any time!
2. Unless you have a specific IEP or 504 accommodation, no additional time will be allowed on tests or quizzes beyond the normal class period.
3. Students should not expect to "retake" tests as there are plenty of opportunities to get assistance prior to test days. The time to get help is before the test, not after you have earned a grade lower than you (or your parents) would like.

Discipline Procedures:

Except for severe infractions (i.e.-endangerment to self or others) that result in automatic ejection from the classroom, failure to comply with the classroom guidelines will result in:

1st incident: Verbal warning
2nd incident: Student/teacher conference after class
3rd incident: Parent-teacher conference and further behavior intervention referral

Make-up Work:

It is the student's responsibility to obtain and complete any make-up classwork within the timeframe established in the student handbook. All lab work, however, must be completed within 1 week of the absence. Make-up work can be completed after school until 3:45 but it is recommended to check with Mr. Meyers in the event there is a staff meeting, etc. Students should request work in advance for prearranged absences and will be held to all deadlines.

Attendance and Tardies:

If you wish to succeed in chemistry you must be in class and on time. All tardies and absences are recorded on your permanent transcript and reflect negatively upon your reliability to future employers. Refer to your student handbook to see the consequences for multiple tardies and absences.

Cell Phones, iPods, MP3 players, tablets:

There is limited cell phone and electronic device usage in this class, ie educational purposes. You are not allowed to play games on your phone or tablet. You may listen to music on your phone when given permission. All offenses will be documented and will result in a discipline referral. Your administrator will choose the appropriate consequence based on the number of offenses.

Plagiarism Policy:

Always do your own work! Don't feel pressured to copy, plagiarize, or collude. For definitions of these terms, consult your student handbook. Consequences of cheating via Mr. Meyers include an automatic discipline referral and a zero (0) on the assignment. Administrative consequences will vary depending on the number of offenses.

Extra Help:

I will be available for extra help after school until 3:45 unless I have a scheduled meeting. Other times may be available by appointment. I have 3rd period planning as well. At the front of the classroom near the door is a large calendar. This is a "Help Sign-up" Calendar. Be sure to sign up if you know you need to come in for help after school or the next day.

Trust in your abilities, do your best and have fun!