

# **CHEMISTRY**

Concordia International School Hanoi School Year 2020-21 v.1

#### **Course Outline:**

Chemistry is a two-semester laboratory course to develop an understanding of the structure of matter and its interactions. All major areas of inorganic chemistry are covered. The course is designed to supply an adequate background for students who intend to enroll in AP Chemistry and/or college chemistry courses. Chemistry makes frequent use of math skills to solve chemical problems. Some memorization of chemical symbolism is required. The course will provide an opportunity for students to develop scientific process skills, critical thinking skills, some laboratory techniques.

### **Teaching and Learning Philosophy:**

Having the right answer is not always the most important goal in Science. But having the right questions is important. Science with only answers and no questions is useless. Learning and science advancement can only take place if you have a head full of questions that test, try, and challenge what is obvious to some and the conventional thought of the day. It is best not to blindly accept everything that scientists, teachers, professors, the media, and textbooks tell you.

### Prerequisites:

Biology, Algebra 1

## **Timing and Topic Order:**

### Semester 1

- Matter and Change.
  - 5 days
- Scientific Measurement.
  - o 4 days
- Atomic Structure.
  - o 4 days
- Electron Configuration in Atoms.
  - o 6 days
- Periodic Law and the Table.
  - o 5 days
- Chemical Bonding.
  - o 7 days
- Chemical Names and Formulas.
  - o 6 days
- Chemical Equations and Reactions.
  - o 5 days

# Semester 2

- Stoichiometry.
  - 6 days
- States of Matter.
  - 6 days
- The Behavior of Gases.
  - o 5 days
- Solutions
  - 5 days
- Acids and Bases
  - 5 days
- Acid-Base Titration and pH
  - 3 days
- Reaction Energy
  - o 3 days
- Elective Chemistry Unit
  - o 3 days

# **Hard Copy Textbook:**

Sarquis, Sarquis, 2012, Modern Chemistry, Houghton Mifflin Harcourt, Orlando Florida

### **Electronic Textbook:**

my.hrw.com username & password are distributed to students in class and via email. It is necessary to allow popup screens for this site in your computer's settings

### Calculator:

All high school students enrolled in Algebra 2, Precalculus, Calculus, Chemistry, or Physics classes will be required to own to their *own* TI Nspire for use in their math and science classes, Concordia Recommends the: "TI Nspire CX CAS Handheld" which may be purchased through Texas Instruments Vietnam.

### **Semester Grading:**

Formative (daily) 40%

Work

Summative (end of

chapter) Work

**Formative grades** include daily grades such as homework grades, participation, laboratory write ups and safety evaluation, assigned textbook work, quizlets assignments, google forms-electronic and written quizzes.

**Summative grades** include, chapter tests, projects and presentations.

60%

### Letter Grades and Grade Point Average:

Are calculated using the following table:

Grad e	Percentag e	GPA	Grade	Percentag e	GPA
Α	93.0 – 100	4.00	С	73.0 - 76.99	2.00
A-	90.0 - 92.99	3.67	C-	70.0 - 72.99	1.67
B+	87.0 - 89.00	3.33	D+	67.0 - 69.00	1.33
В	83.0 - 86.99	3.00	D	63.0 - 66.99	1.00
B-	80.0 - 82.99	2.67	D-	60.0 - 62.99	0.67
C+	77.0 - 79.00	2.33	F	< 59.99	0.00

It is important that students develop good study, organizational and time management skills. Turning assignments in on time is important. Therefore depending on the reason late homework will likely be penalized. It is important for students to complete all assignments even if they are late and therefore they will receive at least some credit for work that is turned in late. Teachers are unable to change grades from a previous marking period.

**Rubrics** are used to assess the student's processing skills as they relate to Biology:

Laboratory Design: Concept understanding, procedures and

methodology

Scientific Data: Collecting, organizing and interpreting data

**Laboratory Writing:** Format, detail, organization, grammar and spelling **Information** Computer skills, software application, ethical use

Technology:

#### **Class Code of Conduct:**

- 1. Respect Self, Peers, Staff and Property
- 2. Act With Common Sense and Integrity
- 3. Follow Instructions
- 4. Strive Consistently For Excellence

#### Attendance:

Attendance is one of the most important factors for student success. Absence from school is not an acceptable excuse to fail meeting class obligations.

#### Work Missed During an Absence:

Completing missed school work with diligence will ensure overall success in the course. Work not completed due to an absence must be made up following the student's return to school.

# Late Arrival to Class - Tardy:

Arriving on time to class indicates a good attitude, maturity, and also is less disruptive to others in the class. Should a student be late they need to enter the classroom in a non-disruptive fashion.

#### Cheating/Plagiarism:

Honesty is highly valued at Concordia. Cheating, copying and plagiarism are not acceptable and are considered contrary to belief in honest behavior. It is important that all students do their own work. The teacher will notify the administration in writing of all incidents of Academic Dishonesty.

### Consequence

- Zero on the assignment
- Any consequence of academic dishonesty may also include any of the following consequences: suspension, behavioral probation, or expulsion.

### **Teacher Contact Information:**

Name: Dr. Brent Kilback Mobile: 0 968364794 Website: bkilback.com

Email: brent.kilback@concordiahanoi.org

# **HERBERT SPENCER**

<sup>\*</sup>This Course Syllabus may be subject to change with instructor's discretion. Should it change students will be given fair notice.

<sup>&</sup>quot;The truth is that those who have never entered upon scientific pursuits know not a tithe [one tenth] of the poetry by which they are surrounded."