



**Syllabus: IB Chemistry SL  
Bethesda-Chevy Chase High School 2011-12**

**Instructor:** Ms. Beverly Pfeiffer (e-mail [Beverly J Pfeiffer@mepsmd.org](mailto:Beverly_J_Pfeiffer@mepsmd.org))  
**Classroom:** B219                      **Office:** D201

**Textbook:** Standard Level Chemistry: Developed Specifically for the IB Diploma by C.Brown and M. Ford. Pearson Baccalaureate, 2008.

*Class Materials* - The following must be brought to class daily: 3-ring binder with loose leaf paper and a calculator with the ability to do logarithms and exponents.

*Goal* - The goal of Chemistry is to instill in the student a curiosity about matter and its interactions; to initiate a lifetime of using an organized, evidence based approach to solving problems; and to recognize the central significance of chemistry to the understanding of all other sciences and its applications to every day lives and real world situations. ***The students will be evaluated with the Standardized IB Exams at the end of the school year, so must retain all concepts for this comprehensive exam.***

*Enduring Understandings* - Chemistry is significant in its relationship to other disciplines and the world. Behavior and properties of materials are organized, classified, and predicted utilizing periodic trends. Mathematical relationships are interpreted and manipulated to model the real world. Experimental investigations are designed, analyzed, interpreted, applied, and communicated through the laboratory process.

*Content* - Chemistry, the study of matter and its interactions, uses an organized approach to solving problems and has central significance to the understanding of all other sciences. The content of the IB Chemistry curriculum is focused to challenge the reasoning and analytical skills of responsible and academically motivated students. Students will also apply their knowledge of chemistry to current events, such as hazardous materials, environmental issues, and development of synthetic materials.

*Laboratory/ Safety and Expectations* - Safety in the laboratory and classroom is the highest priority in this course. Failure to comply with safe procedures (including the wearing of goggles), will result in the student being removed from the lab and receiving a zero for the lab. Students will be required to wear goggles, closed-toed shoes and lab aprons for experiments involving chemicals. Missed labs due to excused absences should be made up with a week. This must be arranged with the teacher.

**Grades** - The scores you earn on tests, lab reports, quizzes and homework will determine your final grade. Each assignment is weighted and will contribute to your final grade as follows:

- Formative assessments, including labs, quizzes, class work and graded homework will be weighted 55%.
- Summative assessments, consisting of unit tests, will be weighted 40%.
- Homework for practice and completion will be weighted 5%.
- The final exam will be worth 25% of the semester grade.

All homework, and projects will be assigned a due date and deadline. The deadline for those assignments is one day later. Work turned in after the due date, but before the deadline, even later that day, will be assigned a 10% reduction in credit. After that deadline, no credit will be given.

However, given that lab reports usually have a longer write-up, and are given a week to complete, the due date and deadline for lab reports will be the same date. As a result, *no late lab reports* will be accepted. They are due at the beginning of class on the day they are assigned.

To determine final grades:   89.5% and above is an A  
  79.5% and above is a B  
  69.5% and above is a C  
  59.5% and above is a D

***Note: There will be no extra credit***

Questions regarding grades can be discussed during lunch or after school.

Attendance is the best predictor of performance in most high school classes.

Major tests are scheduled well in advance. You are expected to take each evaluation on time. If you have an excused absence of only one day, you can expect to take the evaluation (which will normally be of a different format) on the day you return to school, at lunch or after school. To demonstrate mastery, quizzes can be reassessed. To be eligible for a reassessment, a new homework assignment related to the material may be required to be successfully completed. Reassessments will be scheduled after school or during lunch.

**Absences** – If you are absent from school when an assignment is due, you are to submit it on the first day that you return. An exception is made for multiple day absences. It is your responsibility to find out what material was covered in your absence. Worksheets are normally set aside for absent students. If you are absent only part of a day, I am assuming that you are able to stop by and drop off any work that is due, and pick up work that you will be missing. This applies to excused partial day absences due to sports, medical appointments, and illnesses.

**Academic Dishonesty** - Getting help with or working together on homework and labs is acceptable, but copying someone else's work is not. Cheating on exams and quizzes will not be tolerated and will result in all active parties involved receiving a zero for the evaluation. Please review school policy on plagiarism and other academic dishonesty issues.

*Need Help????* - I am here to give as much support and direction as possible to help you succeed. I will do my best to help in anyway I can. Please feel free to ask for any type of assistance.

### **Syllabus Topics for International Baccalaureate Chemistry**

**Core of the course**

- Topic 1 – Quantitative chemistry**
- Topic 2 - Atomic Structure**
- Topic 3 – Periodicity**
- Topic 4 – Bonding**
- Topic 5 - Energetics**
- Topic 6 – Kinetics**
- Topic 7 – Equilibrium**
- Topic 8 – Acids and Bases**
- Topic 9 - Oxidation and Reduction**
- Topic 10 - Organic Chemistry**
- Topic 11: Measurement and data processing**

**Options:**

- E - Environmental Chemistry**
- F – Food Chemistry**

**During Semester A, Topics 1-9 will be covered. During Semester B, Topics 10, and two options will be covered. Topic 11 will be covered throughout the year as we analyze data.**

**In addition, a Group 4 Project (the sciences) will be completed. It is a collaborative activity where students from different group 4 subjects (IB Biology, IB Physics 2, and IB Chemistry) work together on a scientific or technological topic. This project, designed to take 10 hours, will be done outside of class, over the course of approximately two months, and will be due in mid-December. More information and a planning meeting will be held in late September. This project will receive a B-CC grade.**

**The IB Chemistry SL exam consists of 3 parts, also known as “papers.” Papers 1 and 2, which cover the core of the course (Topics 1-11), will be administered on Tuesday, May 8, in the afternoon. Paper 3, which covers the two option topics only, will be administered in the morning on Wednesday, May 9.**