September 2016

Dear Parent/Guardian

Welcome to the 2016-2017 IBDP Chemistry course. This course will cover a lot of material, and in order for the students to reach their full potential, I would like you to become a partner in your student’s education. One of the ways to do this is to be aware of the curriculum, academic standards, and behavioral expectations for this course. Please review the information provided in this document and keep if for reference.

If you have any questions regarding the course, or would like to contact me for any reason throughout the year, do not hesitate at jcollinger1@pghboe.net or via phone at (412) 529-2289.

Thanks,

Mr. Justin Collinger

Approved: __________________

Dr. Wayne Walters, Principal
**Course Title:** IBDP Chemistry  
**Grade:** 12  
**Instructor:** Mr. Justin Collinger  
**School Phone:** 412-529-2289  
**Email:** jcollinger1@pghboe.net

**Course Description**

Chemistry is an experimental science that combines academic study with the acquisition of practical and investigational skills. It is often called the central science, as chemical principles underpin both physical and biological systems. And understanding of chemistry is a prerequisite for many academic disciplines, such as medicine, biology, and the environmental sciences.

All IBDP science courses are focused on deepening students understanding of not just the particular subject being taught, but the nature of science in general. Five overarching themes guide the teaching of IBDP science:

1. Science and the scientific endeavor.  
2. The understanding and structure of scientific knowledge.  
3. The objectivity of science.  
4. The human face of science.  
5. Scientific literacy and the public understanding of science.

IBDP Chemistry is a rigorous course designed to deepen students understanding of the nature of science and the essential principles of chemistry, as well as the societal benefits and concerns associated with our increasing knowledge in theoretical and experimental chemistry. The major topics covered in this course are:

1. Stoichiometric relationships  
2. Atomic Structure  
3. Periodicity  
4. Chemical Bonding and Structure  
5. Energetics  
6. Chemical Kinetics  
7. Equilibrium  
8. Acids and Bases  
9. Redox Processes  
10. Organic Chemistry  
11. Measurements and data processing.
Course Material

The students are given two textbooks, Green and Damji’s Chemistry and the Oxford IB Chemistry Course companion. They are responsible for keeping these books in good condition.

GRADING CRITERIA:

Grades will be given based on the current assignments point value. The work is weighted based on the type of assignment (example: tests are more valuable than homework)

Type of assignments and weight:

Tests/ Major Exams/ quizzes 25%
Labs/Projects/ class work 25%
Homework 10%
Writing 20%
Participation 20%

DP Assessment For Chemistry

The IBDP assessment tests students’ knowledge of chemistry, as well their ability to use this understanding in developing, analyzing, and evaluating scientific investigations. This assessment has two parts: external and internal. The external component is worth 80% of their assessment. It consists of a multiple choice test (20%), an open ended test (40%), and a test regarding a chemistry topic they choose from a list of options (food chemistry, biochemistry, analytic chemistry, etc. Worth 20%). The internal assessment is worth the remaining 20%, and consists of their class work and independent laboratory investigation.

Grade Scale percent as per school board guidelines
A= 90-100%
B = 80-89%
C = 70-79%
D = 60-69%
Below 60 % is failing for the course

Classroom Rules and Expectations:

1. Be on time
   - This means you are in the room, getting seated, and completing your bell ringer when the bell rings
   - Tardy Policy- a student is considered tardy if he/she is not in the room when the tardy bell rings. Four tardies will result in a referral to the office.
2. Come prepared to class
   - Come ready to learn. Bring binder, notebook, assignments, and writing utensils, every day
3. **No food or drink in the science laboratory area.** It is a biological hazard especially when we are working with chemicals.
4. **Cell phones and other electronic devices cannot be seen or used in the classroom.**
5. Be respectful to teachers (including substitutes) and peers
   - **DO NOT** prevent another student from learning or a teacher from teaching
   - Address each other respectfully
6. Follow directions
   - Read or listen to directions carefully and follow them when given the first time
7. Follow safety procedures at all times
   - Complete safety quiz, sign safety contract, refer to safety guidelines often
8. Use all science equipment properly and for its specific purpose only
9. Respect my property
   - If you need to borrow something just ask
   - Use materials sparingly
   - Cabinets and drawers are off limits unless permission is given by me

**Daily Routines:**

**Warm up**
A warm up will be provided each day that must be completed within the first 5 minutes of class.

**Daily Assignment**
Each day the lesson, including homework, will be posted on the board. I suggest students copy the entire posting into notebook to help with organization, and, if necessary, parents can check notebooks/binders regularly to see if your child is completing his/her work.

In addition, each class will be given a Google Classroom code that will allow them to view a summary of the day’s work and any assignments for that day.

**Homework**
Homework is designed to help each child reach his/her academic potential and develop habits of self-discipline and responsibility.
Homework assignments are intended to help students:
- **Develop** independent study habits
- **Reinforce** classroom learning
- **Enrich** their lives through independent projects
- **Involve** parents with their child’s education
Homework must be turned in on time (during your class period), **late homework receives half credit.** The work should always be completed (even if not turned in on time) as all assignments are relevant to being successful in the course and on tests.
Not understanding is not a valid excuse for not completing it. If you are struggling with an assignment you should see me during a free period or email me.

Make-up work
If a student is absent and needs missing work, they can see me after class. Students will have time to make up work if absent (all with a legal excuse). They have the same number of days to do the work as they were absent. Make-up work should be completed at home or during tutorials, not during class. Students are responsible for asking for make-up work when they are absent.

Tests
If a test is announced several class periods in advance, and a student is absent the class period immediately preceding the test, he/she may still be required to take the test without being given extra time.

In addition, silence is required during a test so all of the students can focus. If caught talking, the student will receive a verbal warning. If the behavior continues, they will lose 25% of their score after the second warning, and will receive a zero if caught talking again.

School Activity Absence
If a student has an absence due to a school activity he/she is still required to turn in any work and take any tests without being given extra time (make special arrangements before the absence).

Extra Credit
Students are expected to turn work in one time and study for their tests. Failure to do so will result in a lower grade, and no extra credit will be given to make up for missing work.

Laboratory Activities
Always follow the safety rules and procedures during lab activities. Not following safety rules can lead to accidents and injuries and your removal from the lab. If removal from the classroom becomes necessary you will receive a 0 for the day without the ability to make-up the work. At the end of each lab/activity your space must be cleaned up and materials returned.

Lab make-up
It is not always possible to make up a lab so it is imperative you make every effort to be present.
Student’s Name __________________________________________________

Please leave contact information below and indicate which method you prefer to be contacted. Note: phone calls will normally be made at 3:00 pm.

Parent/Guardian Phone: ______________________________________
Parent/Guardian Phone: ______________________________________
Parent/Guardian email address: ________________________________

Student Signature:
I have read the class outline for Mr. Collinger’s IBDP Chemistry class. I understand and accept the class policies. I understand that I am expected to apply myself to the course and that I will take responsibility for my own actions while in this class.

_________________________ ___________________________  _____________
Student Signature                                 Please Print Your Name
Date

Parent/Guardian Signature:
I have read and understand the class procedure for Mr. Collinger’s IBDP Chemistry class. I agree that my child will abide by these guidelines, and I understand that my child is expected to apply him or herself and take responsibility for his or her own actions.

_________________________ ___________________________  ________
Parent Signature                                 Please Print Your Name                        Date