

**Note: In response to student need, this syllabus may undergo periodic modifications. Any updates will be posted on the HUB.**

## **Michael E. DeBakey High School for Health Professions**

### **Integrated Physics and Chemistry TENTATIVE Syllabus 2019-2020**

**Ms. Hoyer**

[choyer@houstonisd.org](mailto:choyer@houstonisd.org)

### **FALL SEMESTER**

## **Welcome to IPC!**

I hope you find this Integrated Physics and Chemistry class challenging and fun. I think it is fascinating! As your teacher, I will commit to teach you IPC to the very best of my ability. By communicating and working together, we will meet the challenge. In order to start the year off smoothly, I have prepared this information for you and your parents. Please read everything carefully. Take it home, share it with your parents, have it signed, and then place it into your IPC binder as the first pages.

## **Course Description:**

Integrated Physics and Chemistry is designed to introduce ninth grade students to the basic concepts of chemistry and physics. This course employs a traditional instructional model. In class, we will focus on acquisition concepts as well as problem-solving. The homework will focus on simulations and traditional textbook and PowerPoint activities.

You will begin by learning the metric system, and how to convert units within the metric system. You'll learn to distinguish between physical and chemical properties and changes. Subatomic particles, the formulation of compounds and balancing equations are part of the introduction to chemistry. Concepts involving motion, forces, energy and power are investigated with an emphasis on the mathematical relationships. IPC is a laboratory-oriented course. Concepts will be developed through hands-on investigations, measurements, observations, and manipulation of a variety of phenomena.

## **Class Communication**

### **Modes of Communication**

There are several ways we will work and communicate electronically in this course:

- **Classroom HUB Course** : lesson plans, assignments and resources will be available via the Class Course page in the HUB. If you need a PowerPoint or any document to complete an assignment, each instructional unit will have a folder in the course tree. Inside each unit folder you can find current assignments
- **Gradespeed/PSC**: Classroom assignments and grades are found here. Parents and students are highly encouraged to communicate directly with the instructor via Gradespeed. Instructions for creating both parent and student accounts for Gradespeed/PSC.
- **Email**: During the first weeks of school, I will be setting up email lists for each class. You will receive a note to take home which will explain how to subscribe to the parent and student email. I can always be reached by email at [choyer@houstonisd.org](mailto:choyer@houstonisd.org).
- **Text**: Please text me weekday evenings between 5:00 and 9:00 pm, with any questions or concerns you may have at (832)276-3536. Nothing is more important to me than your success in this course. If you find yourself struggling, it is imperative you communicate with me – I will do everything in my power to help you.

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## **Supplies Needed for IPC**

1. Electronic Text book : **Integrated Physics and Chemistry by Glencoe McGraw-Hill**
2. **Three ring binder:** students will keep all returned work in their binder. Studying from your binder is crucial to your success on exams. **Binders will be graded for completeness and organization.**
3. Twelve (12) **dividers** – one for each unit
4. Loose leaf paper
5. Scientific calculators, TI-84 is preferred
6. **Scientific/Engineering Graph paper, 1mm or 2 mm grid.** (Can be printed from a variety of free websites or purchased online or purchased at any college bookstore.)

## **Fall 2018 Course Outline**

**Electronic Textbook: Integrated Physics and Chemistry by Glencoe McGraw-Hill**  
**Simulator: Gizmo.** Available from the Digital Resources tab in the HUB.

### **Cycle 1: August 26- October 5**

#### **Unit 1: Scientific Method, Measurement, and Safety (3 weeks)**

*This unit focuses on the scientific processes and skills that the students are expected to master and practice during the course.*

#### **Unit 2: Introduction to Matter and States (3 weeks)**

*The focus of this unit are fluid and gas properties.*

### **Cycle 2: October 8 -November 9**

#### **Unit 3: Properties and Change (2 Weeks)**

*In this unit, students learn about both physical and chemical properties and changes. Labs focus on physical separation techniques and evidence of chemical change.*

#### **.Unit 4 : Atoms and The Periodic Table (3 weeks)**

*This unit focuses on subatomic structure, electron configuration, dot structures and periodicity.*

### **Cycle 3: November 12-December 20**

**Unit 6: Chemical Nomenclature (3 Weeks)** *The focus of this unit is on the nature of ionic and covalent bonds, with emphasis on nomenclature and dot structure*

#### **Unit 7: Chemical Reactions (2 Weeks)**

*The focus of this unit is on the nature of chemical reactions, with a focus on stoichiometry and predicting products.*

#### **Unit 8: Nuclear Chemistry (1 week)**

*This unit deals with the chemistry of the nucleus. Emphasis is on writing and balancing nuclear equations.*

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## **Classroom Rules**

1. **Be here and be on time.**
2. **Follow all Procedures and directions the first time given.**
3. **Respect yourself, fellow students, the teacher and equipment.**
4. **Work hard.**
5. **Abide by the Code of Student Conduct.**
6. **No food or drink is allowed during class.**

## **Classroom Routines**

Procedures are an important part of life. We follow procedures when we drive, when we board an airplane, when we cook ---almost everything we do involves a procedure or routine. The reason we have procedures in life is so that people and society can get through the day safely and efficiently. Imagine what would happen if, suddenly, drivers ignored the procedure for stopping at red lights and going on green lights. Instant Chaos, right?

There are also procedures in this class. We will do real laboratory science in this class. We may use open flames, explosives, flammable liquids and poisons. We may shoot projectiles or drop objects from great heights. To do these things safely, we must all "be on the same page" - we need to all follow the same procedures, and do things at the proper time.

### **Entering the Classroom**

1. Take your assigned seat quietly. Look over contents of the completed work pocket. **File graded work in the 3-ring portion of your binder. Remember: your binder will be graded.**
2. Make sure your pencil and pen are ready for today's action. Please make sure your pencil is sharp and your pen works. There will be absolutely no pencil-sharpening once the bell rings.
3. **Complete the warm-up.** You will have a maximum of 5 minutes after the bell rings to complete and close your warm-up packet.
4. Gather all materials needed today. Record the objective and assignments in your personal calendar. During this time, I will take attendance, check off homework and/or collect any assignments.
5. Read over any new papers in the Work to Complete pocket of your folder.
6. Log into the HUB to see today's activities and assignments.

### **Handing out and Turning in Papers**

Paper is noisy, distracting and has the bad habit of catching fire when exposed to sparks or flames. To make ourselves more safe and productive, we keep the movement of paper to a minimum.

**As you have complete any written work, place it in the Work Due Today pocket inside your folder.**

Mrs. Hoyer will correct the papers and put them back into the completed work pocket.

For your convenience, the papers you need for the day will EITHER already be in your Work to Be Completed pocket when you arrive for class, or will be available on the HUB.

### **End of Period and Dismissal**

As the end of class draws near, Mrs. Hoyer will call for your attention.

Restore any equipment to its storage place.

Look on the Board to see what work needs to be turned in today. Place this work into your **right side folder pocket, labelled Work due Today**. Please make sure that the ONLY papers in your folder are the work due today. Gather any homework or take-home study materials you need. Any work you plan to complete next class can be placed in your binder for storage.

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### **Absences**

The first rule in this class is "Be here and be on time".

When you are absent, you must make up any missed lessons and assignments during Tutorials, lunch or after school. **For safety reasons, all make-up labs must be completed within three school days of the absence. Often, you can access any paper(s) you need make up via the HUB.** Upon returning to school, come by the room to get missed assignments (right before or after school).

If you are absent on the day an assignment is **given**, you will have five school days to make up the work. If you are absent on the day a prior assignment/test/quiz is **due**, you must be prepared to hand in the assignment, homework, take the test or quiz the day you return to school. If you are absent for any reason, you are responsible for the missed work.

**To turn in make-up work missed due to absence(s): Please bring your make-up assignment(s) to class. Attach a completed Make-Up Work submission form to each assignment. Please place the completed work into the Late/Make-Up Submission Box. To ensure full credit for make-up work, you must submit the work within five days after the absence with a make-up slip attached.**

**DO NOT PLACE MAKE-UP WORK OR LATE WORK INTO YOUR FOLDER. IT WILL NOT BE GRADED FROM YOUR FOLDER. USE THE LATE/ABSENT BOX.**

**Make-up work for absences must be done at lunch, tutorial or after school.**

### **Electronics Use Policy**

Technology such as computers, cell phones and data collection devices are regularly used in class.

Non-academic use is strictly prohibited. Examples of nonacademic uses include, but are not limited to: text messaging, personal social media use, visiting any website not assigned in class, and electronic gaming.

No earphones may be visible at any time, unless permission is obtained from the instructor. The DeBaKey confiscation and acceptable use policies are strictly enforced in Room 413.

### **Academic Integrity Policy**

There are many reasons students choose to engage in academic dishonesty. When students have an unfair advantage over other students, this presents a situation in which students who are doing everything right are punished for not cheating when they receive lower scores than those who did cheat. The instructor will constantly try to prevent academic dishonesty so that all students can excel academically and for the instructor to know where additional assistance is needed.

Cheating makes it impossible for me to give you the instruction you need. Truly, you are only cheating yourself by being academically dishonest. No cheating will be tolerated. The DeBaKey honor policy will be strictly enforced.

I will specifically inform you when group collaborative work is expected on an assignment. Likewise, I will specifically inform you when individual work is expected on an assignment. You will write and sign the following Honor Statement on the top of all individual assignments and on all quizzes and exams:

**On my honor, I have neither given nor received any unauthorized aid on this exam/quiz/paper/lab report.**

Please note that plagiarism in any form constitutes unauthorized aid. Examples of unauthorized aid include, but are not limited to:

- Seeking out or viewing grading keys
- Consulting with any person other than the instructor
- Copying any classmate's work
- Plagiarism in any form
- Consulting any website, notes or text during a quiz or exam
- Advising any student about the contents of a quiz or exam

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### Vandalism and Graffiti

Under the Texas Penal Code, defacing school property is a FELONY offense to deface any school property. Marking, "tagging", doodling, or in any way writing on *any* surface (i.e., bench tops, desks, walls...) will result in immediate referral for disciplinary action.. Please protect yourself by inspecting your lab station when you arrive every day. Report any defacing immediately.

## **IPC Six-Week Grading Plan and Grading Policies**

You are not "given" grades- you earn your grade. Each assignment has a point value ranging between 20 and 100 points, depending on their length and complexity. A minor assignment has a lower point value than a major lab report.

<u>Category</u>	<u>Percent of Final Grade</u>
Tests/Project-3 (Approx. 300 pts.)	50%
Class and Lab Activities (Approx. 600 pts.)	40%
Homework and Participation (Approx. 400 pts.)	<u>10%</u>
	100 %

**Students will be given a choice of in-class activities whenever feasible. Students may select a higher or lower point-value activity in some cases.**

## **Late Work Policy**

If, for any reason, you did not place an assignment (homework or class/lab work) in the Completed Work pocket of your folder on the due date, there are two pathways to receive partial credit:

1. Attach a completed Late Slip and place assignment in the Late Assignment Box **by the beginning of the next class meeting**. A 10% late penalty will apply.
2. For any assignment not submitted as stated above, please email me to make arrangements for an after-school or lunch meeting with me. At the meeting, I will assess your mastery of the content associated with any missing assignment, for a maximum mastery score of 75%. **Mastery of missing assignments must be completed no later than one day prior to the next Test Day.**

## **Test and Quiz Grading Policy**

For tests, at least three school days advanced notice will be given. Please see the HUB calendar for test dates. Before, during, and after the test/quiz, you must silently remain in your assigned seat. All students will write and sign the Honor Statement on the answer document. Students will acknowledge the Honor Statement being in place for online assessments. Graded tests cannot be taken outside of my classroom. You are welcome to review your tests in my classroom, but only after making an appointment with me. Quizzes may be unannounced and will be over homework or in-class assignments. Please see the Absence policy for information regarding test/quiz make up information.

## **Test and Quiz Retake/Redo Policy**

If the student fails a **three-week test** then the student has an opportunity to retake a similar assessment covering the same topics. If the student chooses to participate, then the student is responsible for requesting and scheduling the retake or redo in writing within 2 days after the assessment score is posted in Gradespeed. Retakes must be scheduled with the teacher for outside regular class time. Once complete, the student's retake / redo grade will be averaged with the original grade for a final assessment / assignment grade of no higher than "70%". Retakes are NOT allowed on end of cycle exams (aka common assessment exams) and final exams.

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## **Laboratory Grading Policy**

Formal Lab reports will usually be graded on a rubric. Please refer to the rubric when writing your lab report. It is expected that you will share raw data with your lab partner(s). All other sections of your report (hypothesis, data analysis, conclusions, questions, etc.) are individual work and will be under the Honor Code.

Participation in lab is a privilege not a right. Above all else, safety comes first. Therefore, for the safety of everyone, each student is required to read and/or write up the procedures of the lab assignment BEFORE performing the lab. Unprepared students will not perform the experiment. The teacher will provide the data to the student so a written lab report can still be completed, for a maximum grade of 70%.

All labs must be performed properly and safely. **If a student is removed from the laboratory for misbehavior or safety violation, that student will receive an automatic zero for the lab/lab report grade. The instructor will provide an assignment to be completed during the lab time, for a maximum grade of 75%.**

**Tutorial/ Conference:** I am available for tutorial either during scheduled tutorials, or at Lunch, and after school by appointment. If at any time you or your parents would like to discuss your progress, please request an individual conference with me by phone (832) 276-3536 or email ( [choyer@houstonisd.org](mailto:choyer@houstonisd.org)) at least one day in advance.

## **Fire Drill**

At the sound of the alarm, push in your chair and walk through the door. Turn to the **Left from room 413** to Stairwell C. Take stairwell C to **EXIT** toward the parking garage. Gather around Ms. Hoyer on the Montclair Drive sidewalk near the parking garage, as attendance must be taken during the drill.

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## **Acknowledgement of Guidelines, Rules, and Procedures: Ms. Hoyer's IPC Class**

**The full syllabus is available for download on the Course page on the HUB. A scaled replica is on the reverse side of this form.**

Thank you for carefully reading this information. I expect you to do your very best each class period. In return, I will put my best effort into each class that I teach you. By working together, we will all have a successful semester. If at any time you are having difficulties in this class, let me know immediately and I will be glad to help you. Please mark the appropriate box below regarding online access, then sign the acknowledgement.

Internet and computer access is available in the student's residence. The student may do online activities from home.

Internet and computer access is NOT available in the student's residence. The student/family is willing and able to arrange for internet access outside school (public library, friend or relative's residence, public WIFI, etc.)

Internet and computer access is NOT available in the student's residence. The student/family is not able to arrange for computer/internet or smartphone access. The student requests paper versions of online assignments.

**STUDENT:** I have carefully read and understand these guidelines, rules, and procedures. I will honor them at all times while in Ms. Hoyer's room classroom.

\_\_\_\_\_  
Student's Signature

\_\_\_\_\_  
Student's Printed Name

\_\_\_\_\_  
Date

**PARENT:** I have carefully read and discussed these guidelines, rules, and procedures with my child. I understand and will support them.

\_\_\_\_\_  
Parent's Signature

\_\_\_\_\_  
Parent's Printed Name

\_\_\_\_\_  
Date

**TEACHER:** I will be fair and consistent in administering the guidelines, rules, and procedures.

\_\_\_\_\_  
Teacher's Signature

\_\_\_\_\_  
Teacher's Printed Name

\_\_\_\_\_  
Date