



IPC Course Syllabus

Introduction

Welcome to Integrated Physics and Chemistry, IPC. This class provides the foundations for Chemistry, Physics, and other physical science classes all while still functioning as an independent class.

IPC is a natural progression after taking Biology for students in the 10th grade. IPC focuses more on application of all physical sciences through projects and seeing physical science in the real world (such as engineering, cooking, and other STEM and STEM-related professions).

Success in this class has foundations in both behavior and content. IPC relies on both concrete and abstract thought. Content in this class builds upon a student's algebra skills and academic criticism. We encourage out-of-the-box thinking and tackling problems from different angles. Student autonomy and the idea of "taking charge of one's own learning" is **vital** for success in all courses. Each IPC student should know and follow all general procedures and practices outlined for physical science instruction (including safety) and those detailed in the Jasper Student Handbook and PISD School Board Policies.

All IPC students **MUST** join Google Classroom. In addition, we implore guardians to be invited to their student's Google Classroom as guardians to have an idea of what we are working on in class.

Below is an outline of contact information, classroom expectations, grading policies, and a general idea of the units that we will be covering.

Contacts

Zachery Suess

- Room 2311
- Extension: 27546
- zachery.suess@pisd.edu

Course Academic Requirements

Students are expected to be able to read, write, listen, respectfully critique, perform and apply math, have basic understanding of shapes, and be able to physically build minor structures (such as circuits and models).

Materials

- Notebook

- Pens/Pencils
 - Including (if needed): erasers, white-out, sharpener, etc.
- Internet Access Capable Technology, IACT (provided by the school)

Classroom Policies

Students are expected to...

1. Show up prepared.
 - a. Students will have their notebook, writing utensils, and chromebook (when needed and fully charged) everyday for class.
2. Abide by all school and district policies.
 - a. This is outlined by the Student Handbook and Code of Conduct
3. Be respectful.
 - a. This is outlined by campus policy.
4. Appropriately use technology.
 - a. The only technology a student will need is their chromebook.
5. Abide by lab safety expectations.
 - a. All science classrooms double as a lab; thus, all students must treat the classroom as a lab.

The following sections are collapsed. Please uncollapse them by using the arrow marker next to the section heading.

Course Units

The Atom

Explore what an atom is. Students will learn about recent developments in modern physics including: the strong and weak fundamental forces, nuclear fission and fusion, mass-energy equivalence, and wave particle duality. In addition, students will learn about the organization and properties of atoms.

Performance Theme:

- Explaining and Modeling Science

Subunits:

- Atomic Interactions
- Nuclear Interactions
- The Periodic Table

Properties and Changes of Matter

Understand how atoms interact with each other. Students will learn about how compounds form and nomenclature regarding compounds. Students will also apply the Law of Conservation of Mass and Matter to better understand chemical reactions and its effects and applications.

Performance Theme:

- Experimental/Lab Design

Subunits:

- Physical Properties
- Formation of Compounds

Transfer of Energy

Construct systems of energy transfer. Students will build circuits and electrical generators to better understand how electricity and magnetism work. In addition, students will be able to describe and apply the concepts of waves. Ultimately, students will synthesize these topics to better understand and critically analyze energy systems and energy sources societies use.

Performance Theme:

- Arguing and Debating Science

Subunits:

- Energy Production
- Electricity and Magnetism
- Waves: Light and Sound

Motion

Improve on designs. Students will apply the concepts of force and motion to build, evaluate, and improve on mechanical systems (such as a roller coaster or seatbelt). Students will also explore how gravity affects us on Earth as well as allows for the intricate systems of our solar system, galaxy, and universe.

Performance Theme:

- Engineering Design

Subunits:

- Force
- Gravitation

Consequences

General Escalation:

1. First Offense: Warning + Documentation in Review 360
2. Second Offense: Warning + Guardian Contact + Documentation in Review 360
3. Third Offense: Detention + Guardian Contact + Documentation in Review 360
4. Fourth Offense: Double Detention + Guardian Contact + Documentation in Review 360
5. Fifth Offense: Escalation to Admin + Guardian Contact + Documentation in Review 360

Skipping:

- After the first warning, students will also have their attendance changed to absent.

Tardies:

- Please refer to the tardy policy in the Student Handbook and the *Excessive Absences and Tardies* section of this document.
- Please note that consequences, aside from lunch detentions, will be appropriate to the policy violation and the student.

Restroom:

- If a student is out for more than 10 minutes, the student will be questioned as to why they were out that long.
- After the first time a student is out for more than 10 minutes in the restroom, the consequences will follow the general escalation.
- Please note that continual abuse of the restroom pass may result in the student being unable to use the restroom during class time.
 - If a student under this consequence absolutely must use the restroom during class, they can exchange using the restroom for a lunch detention.
 - Students may earn using the restroom during class time with Admin and/or Teacher approval.

Not Being Prepared:

- Students are expected to come to class prepared. This includes having all materials (such as writing utensils, notebook, and charged IACT with the charger).
- Note being prepared will result in the general escalation of consequences.

Latework:

- Any daily work turned in late will result in a 10 point deduction per day. After 4 days:
 - And the assignment is turned in, the resulting grade will be a 50.
 - And the assignment was never turned in, the resulting grade will be a zero (0).
- Any major work turned late will result in a 5 point deduction per day after 2 days and potential delayed grading.

Academic Integrity

Cheating, plagiarism, fabrication, and other forms breaching academic integrity will result in zero credit, guardian notification, and/or administrative discipline. Cheating, plagiarism, and fabrication are defined in the Jasper Student Handbook. Use of AI counts as cheating, plagiarism, and fabrication according to the [PISD position on AI](#).

Academic Integrity Violation on Major Grades:

- Guardian Contact
- Documentation in Review 360
- 1 Day ISS per offense.
 - This does make this offense an immediate Admin Referral.

General Grade Guideline

1. Grade Notification Set Up
 - a. Set up Skyward Family Access to notify you of any missing or failing grades.
 - b. <https://www.pisd.edu/familyaccess>
2. Grade break down:

- a. 9 Weeks:
 - i. Major Grades: 60% of 9 week Grade
 - ii. Minor Grades: 40% of 9 Week Grade
 - b. Semester:
 - i. 1st 9 Week: 40% of Semester Grade
 - ii. 2nd 9 Week: 40% of Semester Grade
 - iii. Semester Exam: 20% of Semester Grade
 - c. Final Grade:
 - i. 1st Semester: 50% of Final Grade
 - ii. 2nd Semester: 50% of Final Grade
3. 9 Weeks Cumulative Grades:
- a. Homework:
 - i. Homework will be assigned almost every day. A student's homework grade is a single cumulative daily grade based on the accuracy of the homework turned in.
 - ii. The purpose of this is to show progress of a student's mastery of the units for the 9 weeks.
 - b. Warm-Ups:
 - i. A warm-up will be given almost every day. A student's homework grade is a single cumulative daily grade based on the completion of the warm-ups turned in.
 - ii. The purpose of the warm-up grade is to provide a cushion for the students and reward students for working diligently.
4. Jasper Re-Teaching Policy and Re-Assessment Policy
- a. Students will have the opportunity to improve their original test scores if the test score was below an 80. This will be done by doing a two-part cumulative assessment towards the end of the 9 weeks. Students have the option to attend a re-teach before doing test corrections. Designated re-teach days are the school day before the cumulative assessment.
5. UIL:
- a. According to the UIL academic requirements, students taking this course must pass with at least a 70 every 3 weeks in order to participate in UIL activities.

Major Grades

- 1. Improving the Major Grade:
 - a. PISD Policy and Expectation:
 - i. If a student fails an assessment, the teacher must reteach and provide an opportunity to reassess for mastery which is reflected by a minimum grade of 70%
 - b. Reteach Time:
 - i. The after-school tutorial 1 week before the end of the 9 weeks OR semester exam review week.

- c. Students will have an opportunity to improve their major grades at the end of the 9 weeks with a task about the content of that 9 weeks.
 - d. The improvement opportunity will be through a performance task.
 - i. Cumulative Performance Assessment (CPA):
 - 1. 40% of the grade will be a cumulative concept check.
 - 2. 60% of the grade will be the cumulative skill-based activity.
 - e. The score of the task will average with a major grade from that 9 weeks up to an 80.
 - f. ***There are no retests in IPC.**
2. Projects:
- a. Students will generally be expected to provide their own presentation materials in order to complete projects.
 - i. Presentation Materials include but are not limited to:
 - 1. Trifolds
 - 2. Posters
 - 3. Decorations
 - 4. Printed Materials
3. Papers/Essays:
- a. Students will occasionally be expected to write a research based 5 paragraph essay or multi-paragraph paper. Students will be expected to meet the following requirements for the essay or paper in addition to the contents of the paper in order to receive an accurate grade that is a reflection of their mastery of the content:
 - i. Use of citations in APA format.
 - ii. No use of AI.
 - iii. Attempted correct spelling and grammar.
 - iv. Written in English.

Missing Work

- 1. If a student is missing an assignment, it will be put into the gradebook as a zero and missing.
- 2. Late Work:
 - a. The highest possible grade a student can earn is reduced by 10 points each day the assignment is late based on when the assignment is due.
 - b. After 4 days of the assignment being late, the grade defaults to a 50 if the assignment was turned in. If the assignment was never turned in, the grade defaults to a zero (0).
 - c. If the student was absent on the day the grade was assigned, please look at parts 3 and 4 of Missing Work.
 - d. No Name:
 - i. Students who do not put a name on their assignment will lose 5 points automatically.
- 3. Non-UIL Excused Absences:

- a. If a student has an excused absence, they are allotted an extension equal to the number of days missed.
 - b. For minor grades that are not concept checks, the grade may be excused with an “*”. “*”s mean that the student is excused from the grade but may still do the assignment at the student’s and/or guardian’s request.
 - i. All “*” will default to a zero (0) and No Count at the end of the grading period.
4. Unexcused & UIL Absences:
- a. If a student has an unexcused absence, they are not allotted an extension nor can they be excused from the assignment.
 - b. If a student has a UIL absence, they are expected to abide by the Student Handbook and UIL guidelines.

Excessive Absences and Tardies

1. 3 tardies count as an unexcused absence. Consequences for tardies are as follows:
 - a. 1st Tardy: Teacher Warning to Student
 - b. 2nd Tardy: Teacher Warning to Student + Guardian Email
 - c. 3rd Tardy: Single Detention. A no-show results in a doubling of the detention.
 - d. 4th Tardy: Double Detention. A no-show results in a doubling of the detention.
 - e. 5th Tardy: Will be handled according to the Student Code of Conduct and Student Handbook by an Administrator.
2. All students who have excessive absences (missed more than half of the unit) will have to go on a recovery plan as a support system in order to make up grades. This plan can include coming before or after school to tutorials OR coming in during designated academic support dates (such as After Hours).
3. Students are encouraged to do everything possible to be productive in class for all instruction. This includes being in class on time and minimizing absences. As an insurance, there are support systems in place to ensure your child’s success.
4. Students who have excessive unexcused absences (as stated in the Texas Education Code § 25.095) may be deemed truant as a last resort. The process of truancy is outlined in the Student Handbook. For a list of excused absences, see TASB Policies FEA(LEGAL) and (LOCAL).