Integrated Physics & Chemistry (IPC) Course Syllabus, 2023-2024

Jim Ned ISD

Teacher: Ms. Scott Conference: 7th pd

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COURSE DESCRIPTION: In Integrated Physics and Chemistry, students conduct laboratory and field investigations, use scientific methods during investigation, and make informed decisions using critical thinking and scientific problem solving. This course integrates the disciplines of physics and chemistry in the following topics: force, motion, energy, and matter.

GENERAL OBJECTIVES:

- 1. Obtain a foundation in Physics and Chemistry that is applicable towards further science studies and/or careers.
- 2. Gain an understanding of the mathematical nature of the physical world.
- 3. Utilize modern techniques of learning including technology, group work, and problem solving.
- 4. To present a historical as well as current perspective in the field of physics and chemistry.
- 5. To become aware of modern laboratory techniques.
- 6. To refine cognitive skills in recall and reasoning.

COURSE OUTLINE:

First Semester (Physics)

Introduction: Processes for Scientific Investigations

Unit 1: Position, Speed, and Acceleration

Unit 2: Forces and Momentum

Unit 3: Potential and Kinetic Energy

Unit 4: Thermal Energy

Unit 5: Waves
Unit 6: Electricity

Unit 7: Energy Resources

Second Semester (Chemistry)

Unit 8: Properties of Matter

Unit 9: Elements and the Periodic Table

Unit 10: Nuclear Reactions

Unit 11: Solutions

Unit 12: Chemical Reactions

GRADING POLICY: A minimum of two (2) major exams will be recorded each six-weeks period. Lecture tests will include any combination of multiple-choice, matching, fill-in-the-blank, and short-answer questions. Exam questions may cover material from the textbook, lecture notes, handouts, laboratory assignments, and research assignments.

Tests	50%
Lab Assignments	30%
Classwork/Quizzes	20%

LATE WORK: <u>Lab reports/papers are due at the first of the class period</u> on the date they are due unless otherwise noted. *Late work will not be accepted and will receive a grade of "zero" in the grade book.*

MISSED WORK DUE TO ABSENCES: Students should obtain make-up work during morning tutorials. This will help to minimize disruption of classroom instruction. It is the responsibility of the student to obtain missed work from the teacher.

Extracurricular or "Planned" Excused Absences: The student is responsible for collecting assignments prior to the absence.

Other Absences: An assignment with the student's name written on it is placed in the "Missed Work" (Absences) tray in the front of the classroom automatically on the day a student is absent. Students should come to my room before school on the day they return to get their daily make-up work. Students have two school days (48 hours) to complete and turn in missed daily work from the date they return. If the work is not completed within the allotted time, it will not be accepted and a "missing" grade will remain in the gradebook. (Count as zeros).

TUTORIAL SESSIONS: As Integrated Physics & Chemistry can be a difficult subject, it may be necessary for you to seek additional help. You may come into tutorials before school or during my conference period. *There is no excuse for not being prepared if you fail to take advantage of these tutorial sessions.*

^{*}Most missed notes or assignments will also be posted in Google Classroom.

have the opportunity to gain from the time ☐ Refrain from making offensive ren sleeping, or engaging in any other current student handbook. ☐ Phones must be turned off and put during class will be confiscated by ☐ An obvious lack of integrity (cheat in an immediate zero.	cive to learning. In order to assure all students e spent in class, students are expected to: narks, reading material not related to class, form of disruptive behavior as stated in the away during class. Any phone seen or heard the teacher and submitted to the campus office. The distribution of the campus of the campus office. The distribution of the campus off
 Be Prepared For Class Treat Others With Respect Talk When Given Permission Do Your Own Work Remain Seated 	
I have read, understand, and a	gree to the above policy statements for IPC.
	Date
	Student's Signature
	Parent's Signature