

7th Grade Honors Integrated Physics & Chemistry (IPC) Science Course Syllabus

| Teacher | Email | Remind | Conference | Learning Platform |
|----------------------|-----------------------------|--------|---|----------------------|
| Nora Galan | nora.galan@stisd.net | | 1:00PM-2:30PM A Days 8:30AM-10:00AM B Day | |
| Andrea Ratliff | andrea.ratliff@stisd.net | | 1:00PM-2:30PM A Days 8:30AM-10:00AM B Day | |
| Sharai Martinez | sharai.martinez@stisd.net | | 1:00PM-2:30PM A Days 2:30 PM-4:00 PM B Day | itslearning |
| Christa Respondek | christa.respondek@stisd.net | | 1:00PM-2:30PM A Days 2:30 PM-4:00 PM B Day | |

<u>Course Description</u> –Rising Scholars Academy 7th grade IPC Science is an accelerated Science course geared towards meeting the standards set forth by the State of Texas and to increase the critical thinking ability of every student. It is a laboratory-oriented course which provides students an opportunity to investigate scientific concepts using the scientific method and make informed decisions using critical thinking and scientific problem solving. This course will allow the students to develop a deeper understanding of scientific methods and concepts as described in the Texas Essential Knowledge and Skills (TEKS).

<u>Course Outline</u>

| Quarter 1 | | |
|-----------|---|--|
| Topics | Classroom safety | |
| | Reading Measurement | |
| | Scientific notation | |
| | Significant Figures | |
| | Dimensional Analysis | |
| | Density | |
| | States of Matter | |
| | Classification of Matter | |
| | Physical/ Chemical changes and properties | |

| Quarter 2 | | | |
|-----------|---|--|--|
| Topics | Structure of an atom | | |
| | Ions and Isotopes | | |
| | Periodic Table | | |
| | Bohr and Lewis dot models | | |
| | Trends on Periodic Table | | |
| | Ionic, Covalent, & Metallic Bonds | | |
| | Counting Atoms | | |
| | Law of Conservation of Mass | | |
| | Balancing Equations | | |
| | Types of Reactions | | |
| | Nuclear Chemistry | | |
| Quarter 3 | | | |
| Topics | Distance vs Displacement | | |
| | Speed vs Velocity | | |
| | Graphing Distance vs time | | |
| | Acceleration | | |
| | Graphing Speed vs time | | |
| | Newtons Laws | | |
| | Heat Transfer | | |
| Quarter 4 | | | |
| Topics | Thermal Energy | | |
| | Transformation of Energy | | |
| | Ohms law | | |
| | Series Circuits | | |
| | Parallel Circuits | | |
| | Waves | | |

Resources

2015. Chemistry: Matter & Change – Glencoe; McGraw Hill Education CPO Physics

2015. Physics: Principles & Problems -- Glencoe; McGraw Hill Education

Technology

The use of electronic devices will be permitted at the teacher's discretion.

Technical Support

@rsatech

<u>Materials</u>

3 Composition notebooks Texas Instrument TI-30XIIS

Grading

Students' average will be calculated as follows:

- 40% Tests/Projects
- 40% Labs/Quizzes
- 20% Homework & Daily work

Homework/Daily Work Guidelines

Student's homework is due on the given due date and time set by the teacher on itslearning. Any work submitted past the due date is considered late. The maximum grade for any late/missing work will be a 70% and must be turned in within the same 3-week grading period. Students absent on the day homework was assigned shall be given the same amount of time to complete the assignment as the rest of the class. The absent student shall receive a due date for the next day the student returns to class. It is the student's responsibility to complete any missing work, which can be found on itslearning. At the teacher's discretion, mandatory tutoring may be assigned until missing work has been completed.

Lab Work

Lab work will be individual or group work. When completing group work, each member of a team is expected to contribute in achieving the objectives. Students not contributing to the work will be addressed, as per the Student Code of Conduct. Each student is expected to submit individual lab reports. Participating in lab activities is a privilege. All students are instructed in the proper behavior in a science lab classroom. If a student is asked to leave the classroom due to unacceptable behavior and/or unsafe classroom behavior, then the student will receive zero credit for all missed classroom assignments that day. Penalties may include administrative consequences for an infraction of the Science Safety contract, which may range from detention to suspension. Repeated lab safety violations may result in the loss of lab privileges.

Assessments

- A. <u>*Quizzes*</u> are designed to monitor the student's progress on regular basis and may be announced or unannounced. Students should be prepared for daily assessments; there are no retakes. Corrections are expected to be completed for quizzes with a failing grade. Students may turn in quiz corrections for a maximum grade of 70% to replace the failing grade.
- B. <u>*Tests*</u> will be scheduled after every major topic. Tests may include a variety of question types (multiple choice, true/false, fill-in-the-blank, etc.).

Students who receive a failing grade on a test may retake an alternative test within 7 days of receiving their results, BUT only after the student has met the following criteria:

- 1. Student attends at least one tutoring session.
- 2. Teacher and student must agree on retest date.
- C. <u>Semester Exams</u> Students are encouraged to maintain a Science notebook and keep quizzes and tests throughout the school year to review as study material for semester exams. Semester exams will count for 25% of the student's semester grade. There are no retests for semester exams.

Projects

This course requires several major and minor projects throughout the year. Projects must be completed and submitted as assigned by the teacher. Please make sure to look at itslearning and use your planners to keep track of upcoming projects that are due.

Pyramid of Interventions

The objective of this class is for every student to be successful in demonstrating mastery of the Texas Essential Knowledge and Skills (TEKS). Students not successfully progressing will be assisted by the pyramid of interventions. These interventions may include individualized lessons and/or assignments, required tutoring during the school day or after school, parent contact, and other interventions specific for the student.

Netiquette (Online Etiquette) Statement

Please adhere to the same standards of behavior and professional respect online that you would follow in face-to-face communication with others, but most particularly when writing email and when taking part in collaborative and discussion board activities. Students are expected to adhere to the South Texas ISD Acceptable Use Policies when Using Networks. The Student Code of Conduct can be found on the school website.

Digital Citizenship Standards & Expectations

-Be on time.

-Wear proper attire.

-Choose a good location and be aware of your background of your video camera when you are in a meeting.

-Mute yourself right when you join and keep your microphone muted when you are not speaking.

-Use the chat to ask questions and make comments related to the topic discussed.

- -Give your full, focused attention.
- -Use respectful behavior and language.
- -Stick to appropriate topics of discussion.
- -Use only appropriate icons, emojis, and avatars.
- -Wear school appropriate clothing when participating in lessons.

General Guidelines to Respect All Participants

- Respect the right of each person to disagree with others.
- Treat people the same as you would face-to-face.
- Respect the time of others.

Guidelines when Communicating with Others (Email, Discussions, Blogging, and ETC.)

- Always sign your full name to any contribution you choose to make.
- Be constructive in your responses to others in the class.
- Do not use all caps (Doing so may be interpreted as shouting).
- Re-read your postings before sending them.
- Always think before you write.
- Respond respectfully.
- Use appropriate grammar and structure.
- Spell-check your postings.
- Use short paragraphs focused on one idea.
- Use academically-appropriate language at all times. No text-talk.

*All district guidelines/policies supersede campus guidelines/procedures/systems.

**Course syllabi may be amended to reflect any changes at the school, district, county, state, and national levels.