

Fundamentals of Physical Science Course Overview and Syllabus

Instructors: Mrs. DeCaro & Mrs. Maloney Room: C213

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DIVERSITY STATEMENT

All individuals have a right to an educational environment free from bias, prejudice and bigotry. As members of the Basha High School educational community, students are expected to refrain from participating in acts of harassment that are designed to demean another student's race, gender, ethnicity, religious preference, disability or sexual orientation.

COURSE DESCRIPTION

This lab oriented course offers an overview of physics and chemistry. Emphasis will be placed on developing conceptual understandings of the following topics: Motion, Forces and Momentum, Work, Energy Storage and Transfer, Physical, Chemical, Electrical and Magnetic Properties of Matter and Atomic and Nuclear Processes.

COURSE PREREQUISITES

Concurrent enrollment in Algebra IIA (Math Year 3A) and Algebra IIB (Math Year 3B) and a prerequisite of Investigative Science and Biology

COURSE TEXT

Our required text is *Conceptual Integrated Science*, by Paul G. Hewitt, Suzanne Lyons, and John Suchocki. Pearson/Addison Wesley (2006)

COURSE OBJECTIVES

Fundamentals of Physical Science will give you an opportunity to study the physical universe. You will discover that nature can be understood in terms of fundamental rules and models. There are relatively few fundamental rules and models compared to the wide range of phenomena we encounter in the physical universe. If you learn how to apply these rules and models to the world around you, your ability to understand phenomena in the natural world will be satisfying and stimulating. The objectives of this course are twofold: to provide you with a general background in the fundamentals of physics and chemistry, and to provide you with concepts and examples found in everyday life. The lectures, homework, and exams test your understanding of physical science and provide you with a foundation for science literacy. This course will help you search for truth, apply the ideas you learn, and share them with others. The important ideas are accessible to you *no matter what your previous experience in mathematics or science* may have been.

MATERIALS NEEDED

- ✓ Pencils and pens (daily writing tool of choice)
- ✓ Colored pencils
- ✓ 3 ring binder, at least 1½ " wide
- √ composition notebook (supplied)
- ✓ Loose Leaf Paper
- ✓ Scientific Calculator
- ✓ Student Planner

GRADING POLICY

Quarter grades will be calculated based on student test scores, quizzes, lab reports, journals, homework, projects, and presentations. Grades are based on cumulative points per quarter and **the percentage of possible points awarded**. Letter grades are based on the following percentages:

Categories			Gra	Grades		
Tests & Quizzes	=	30%	100%-90%	=	\mathbf{A}	
Laboratory	=	30%	80%-89%	=	В	
Homework	=	20%	70%-79%	=	\mathbf{C}	
Classwork	=	10%	60%-69%	=	D	
Projects	=	10%	50%-59%	=	\mathbf{F}	

Semester Grades are calculated as follows:

First Quarter = 40% Second Quarter = 40% Final Exam = 20%

Each student will keep a running total of points and percentages in their binder so they are aware of their grade at all times.

PROGRESS REPORTS/CHECKING Student's grades

Progress reports will be sent home periodically for review. It is up to the student to make sure their grades are correct and all assignments have been turned in and recorded appropriately. Parents can access their child's grades and assignments by going to the school's website and clicking on Parent Connect. Students' information is only accessible by using an individualized password assigned by the school. Parents may contact office personnel/counselor for their child's password.

POLICIES AND PROCEDURES: CONDUCT POLICY

In accordance to the student handbook, students have a responsibility to demonstrate respect for other students, faculty, staff, community members and equipment. You must also abide by school rules and regulations in order to provide a safe and positive learning environment. **Profanity will not be tolerated!**Consequences for disruptive behavior:

1st offense: warning to student

2nd offense: call to parent and detention 3rd offense: referral to administration

ATTENDANCE POLICY

It is important to be present every day in class. If you are absent, PLEASE have your parent or guardian call or email to excuse you. **Your grade will reflect your attendance in this class**. If you accumulate 10 days of unexcused or excused absence, you may be subject to failing the class. You must be in your seat prepared for class before the bell rings or you will be marked tardy. Tardiness will not be tolerated and is subject to consequences such as after-school detention. A warning will be issued for the 1st and 2nd tardy. The 3rd tardiness will result in a phone call to the student's parent(s) or guardian(s). Any further tardy **after 3** will be subject to **a referral to administration**.

MAKE-UP POLICY

- It is the <u>student's responsibility</u> to obtain missed work.
- Many labs will consist of consumable materials, so timely make-ups are imperative. Labs must be made up after school or by appointment within **1-week of the associated absence**.
- Late assignments *will* be accepted for half credit. If the student has an excused absence they have **the same number of days as excused to make up work** for full credit, otherwise assignments turned in after will receive half credit. Late assignments will only be accepted before the unit test. Time extensions can be given on a case-by-case basis with suitable justification. Students requesting a time extension should meet with the instructor to discuss a new due date.

Learning should be a fun and positive experience. Student: you are expected to make an honest effort, achieve to the best of their ability and maintain a positive attitude. Please let us know what we can do to facilitate your success in FPS class. Parents and guardians, please feel free to contact Mrs. Maloney or Mrs. DeCaro with any questions or concerns regarding your child or the course. Together we can make this an exciting year, as we explore how physical science governs the world in which we live.

TENTATIVE COURSE SYLLABUS Semester 1

Semester 1	Semester 2
Unit 1: Scientific Measurements	Unit 8: Waves- Sound and Light
Unit 2: Motion	Unit 9: The Atom
Unit 3: Newton's Laws	Unit 10: Nuclear Physics
Unit 4: Momentum and Energy	Unit 11: Investigating matter
Unit 5: Gravity	Unit 12: Nature of Chemical Bonds
Unit 6: Heat	Unit 13: Chemical Reactions
Unit 7: Electricity & Magnetism	Unit 14: Organic Chemistry



Fundamentals of Physical Science Course Statement Acknowledgement 2012-2013

I acknowledge that I have read over the course statement for FPS. I understand the student's role and responsibilities associated with the course. I understand that if I have any questions or concerns regarding the course grade, content, or requirements, I can contact the teacher.

Please return this signed form to the to form is returned by	eacher. Your student will receive 10 homework points if the
Parent/Guardian Signature	Print Name
DAY Contact phone number	Email address
Student Signature	Print Name
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This course will utilize the Internet at	t school for research purposes. Please sign below to give
your child permission to use the Inter	enet in accordance with the Basha High School Electronic
Information Services User Agreemen	at, which may be found in the Student Planner. Please
indicate your permission by signing be	elow
Internet Activities.	Yes, I give my daughter/son permission to participate in
in Internet Activities.	No, I do not give my daughter/son permission to participate