

6th grade Pre-Ap Jaguars



PHYSICAL SCIENCE Syllabus

Discover

Explore

Respect

Restore

GDOE Mission Statement: Our educational community: Prepares all students for life, Promotes Excellence, and Provides Support.

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www.preapjaguars.ums.weebly.com

GDOE Vision Statement:

EVERY STUDENT:
RESPONSIBLE,
RESPECTFUL;
AND READY FOR LIFE

LPUMS Mission Statement:

THE LUIS P. UNTALAN
SCHOOL COMMUNITY
WILL EMPOWER STUDENTS
WITH THE KNOWLEDGE
THAT WILL ENABLE
THEM TO BE
COMPETENT,
PRODUCTIVE,
AND RESPONSIBLE
CITIZENS
IN OUR SOCIETY.

Length of Course: 1 year

Course Description: This course is designed to each at an **accelerated pace** the process of science. It will engage students with inquiry-based teaching strategies tied to Science, Technology, Engineering, and Mathematics (**STEM**) so students will be able to describe objects and events, ask good questions, construct explanations, test those explanations against current scientific knowledge, and communicate their ideas to others. They will use critical and logical thinking and actively develop their understanding of science by combining scientific knowledge with reasoning skills. They will be prepared for 6th Grade **Next Generation Science Standards (NGSS)** through various reading, researching and writing exercises.



Course Objectives

A. Use the scientific methods and processes of discovery to make observation, discover new facts, and answer question
B. Be proficient in using the metric system, using math as it pertains to science and in documenting data (notes and lab reports)

C. Expand their literacy and knowledge of the nature of science, physical, life, and earth science.

D. Realize, understand and support the inherent truth of science research, investigations and experiments

1st Qtr Matter & Instruction

PS1.A: STRUCTURE AND PROPERTIES OF MATTER
PS1.B: CHEMICAL REACTIONS
PS1.C: NUCLEAR PROCESSES

How do particles combine to form a variety of matter?
How do substances combine or change to make new substances?
What forces hold the nuclei together and mediate nuclear processes?

PSST 1.1 Develop a model showing how atoms combine to form molecules on a larger scale.

1.2 Develop a model that shows the wide range of molecules in size proportion.

2nd Qtr. Motion & Stability

PS2.A: Forces and Motion
PS2.B: Types of Interactions

How can one predict an object's continued motion, change in motion, or stability?
What underlying forces explain the variety of interactions observed?

PSST 2.1 Analyze and interpret data on the structure and function of substances in order to identify the substance.

3.1 Develop a model that shows how the particles in and liquids move as compared to a solid.

3rd Qtr. Energy Transfer

PS3.A: Definitions of Energy
PS3.B: Conservation of Energy and Energy Transfer
PS3.C: Relationship Between Energy and Forces
PS3.D: Energy in Chemical Processes and Everyday Life

What is energy? What is meant by conservation of energy? How is energy transferred between objects or systems? How are forces related to energy? How do food and fuel provide energy? If energy is conserved, why do people say it is produced or used?

PSST 3.2 Develop a model to demonstrate how particles in a liquid will change as they are heated and move from the liquid state to a gas.

4.1 Construct a model that shows how solids and liquids have definite volume, but solids have definite shape while liquids do not and how particles behave changing from one to the other.



4th Qtr. Wave Energy

PS4.A: Wave Properties
PS4.B: Electromagnetic Radiation;

What are the characteristic properties and behaviors of waves?

What is light? How can one explain the varied effects that involve light? What other forms of electromagnetic radiation are there?

PSST 5.1 Develop and/or use a model to predict and/or describe how solids may be formed from extended or repeating structures.

6.1 Construct an explanation of how matter changes state when thermal energy or pressure is added or removed, using models or representations.

Instructional Strategies: -Portfolio to include Graphic Organizers & Note-taking - Home and Class Lab Activities -STEM Inquiry Based Learning - Cooperative Learning - Using computer apps to collect data and present -NGSS Engineering Design practices - model building - Gallery Walks - Hands-on Outdoor Activities - Exit Tickets.

Textbook/ Teaching Resources:

Textbook:

Physical Science.
Globe Fearon
NSTA- National Science
Teacher Association Lessons
STEM Education Curriculum
NGSS Curriculum

Online Resources

CK-12 Science
Youtube
PBS University Guam

COURSE MATERIALS:

FACE TO FACE

All "in class" assignments and assessments will be administered and submitted through Online classroom platforms which is accessible from all devices and requires no paper or external storage devices. Students will be provided access to laptops in the classroom to complete all assignments linked to Online Classroom Platform.

If the student has access to a computer/laptop and to the internet at home, "at home" assignments may be submitted to the teacher via Online Classroom platform which is accessible from all devices and requires no paper or external storage devices.

If the student has access to a computer/laptop at home, but no internet access, they may save their "at home" assignments on an external storage device/flash drive and upload them into Google Drive on their scheduled on-campus report day. The student may also choose to complete their "at home" assignments on the paper of their choice, in either pen or pencil (please ensure that writing is legible).

Some basic laboratory supplies will be needed to conduct scientific investigations and build models that represent matter and processes in physical science.

ONLINE

Internet access and a device capable of accessing email, Powerschool, ZOOM and other apps to be able to participate in online instruction. GDOE Student email access: All assignments and assessments will be administered and submitted through online classroom platforms which is accessible from all devices and requires no paper or external storage devices.

Some basic household materials are needed to conduct "at-home" scientific investigations and build models that represent life science-related systems. A device capable of taking pictures and/videos and voice recordings to upload designed models.

Student Supplies: Student Supplies for School & Home Lab Activities:

-1 plastic folder with 3 prongs and side pockets-Pencils and an eraser

~~-1 pkg. filler paper~~

-5 tab dividers

~~-Pens (black or blue)~~ ^{Provided} by school

~~-(1) 12 pack colored pencils~~

-safety scissors

-glue ^{5 face masks}
(Please wash before using)

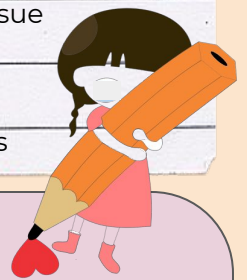
-tape

Recommended Hygiene Supplies for Science class

1 box of Kleenex tissue

-hand sanitizer

- Clorox/baby wipes



CITIZENSHIP AND LIFE READINESS SKILLS WILL BE REPORTED USING THE FOLLOWING CATEGORIES:

- (4) EXCELLENT
- (3) SATISFACTORY
- (2) NEEDS IMPROVEMENT
- (1) UNSATISFACTORY
- (NE) NOT ENOUGH EVIDENCE/NO EVIDENCE,
OR NO EFFORT

Citizenship and Life Readiness Skills will be determined by the following criteria:

- a. **Engagement:** Participates in class discussions and activities, asks and answers questions, and is on-task either in-person or on video conferences, depending on model of learning or event.
- b. **Organization and Planning:** Organizes notes, handouts, supplies, and instructional materials; plans assignments, activities and tasks effectively; and manages time efficiently to meet deadlines.
- c. **Completion and Submission of Assignments:** Completes and submits assignments regularly and on time.
- d. **Conduct:** Displays respectful and appropriate conduct when communicating with teachers, peers, and others either online or during face-to-face instruction.
- e. **Accountability:** Follows school rules and takes responsibility for actions.

Links to current COVID Student EXPECTATIONS AND PROTOCOLS

<http://dphss.guam.gov/>

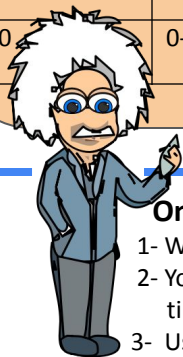
<https://www.gdoe.net/District/Portal/covid-19-information>



Grading

Student achievement will be assessed and reported using a four-point proficiency scale instead of the current percentage grade on specific standard, skills or topics. The simplified scale gives students, teachers, and parents a quicker and clearer reference to easily determine which standards have been mastered and which need further study. These levels of proficiency will then be translated or converted to an easily recognizable letter grade.

Proficiency Level	Average Scale Score	Letter Grade/Percentage	Description
4	4.00	A+(100)	Advanced understanding and application of the standard(s). Exceed standard(s) expectations.
3	3.00-3.99	A(90-99)	Proficient understanding of the standard(s) and progressing toward level 4.
2	2.50-2.99	B (80-89)	Meets partial understanding of the standard(s) and is progressing to level 3.
1	2.00-2.49	C(79-70)	Meets less than partial understanding of the standard(s). Continued supports are in place.
0	0-1.99	D/F(69-0)	Shows no foundational knowledge, skill or prerequisite of the standard(s). Student is in need of continued support and monitoring.



$$E=mc^2$$

Online Classroom Rules and Expectations

- 1- When entering classroom meetings, have your microphone muted and video camera turned on.
- 2- You'll need to open multiple screens so the class meeting and lesson presentations can be viewed at the same time as well as any other interactive program used for class discussions.
- 3- Use the Chat box to enter your name for attendance and to post questions outside of the lesson presentations.
- 4- Class meetings will be held using Zoom so you will need to have your GDOE Student email and password to access class sessions.
- 5- All assignments will be submitted using Google Classroom. When making a class post please follow acceptable online citizenship expectations. Assignments files must have your full name identified.

Consequences for disruptive behavior and non-submission of assignments:

1. 1st Warning- Verbal
2. Contact parent and sign Progressive Referral Forms
3. Parent Conference (Individually or Team)
4. Discipline Referral Form forwarded to SSO

Textbook Policy:

Students will be issued a numbered textbook. A letter will be given to parents notifying them of the number and condition of the textbook. The parent must inspect the book and sign the form before the textbook can be issued for the rest of the school year. Students will be responsible for the wear and tear of the book. Any damages or loss must be reported to the teacher. Parents will be charged the cost of the book if damaged by graffiti, mold, water, or tearing. Please refer to Board Policy 601 relative to textbooks.

Classroom Rules and Student Expectations:

For school rules and procedures please refer to L.P. Untalan Middle School Student handbook and planner.

1. Respect authority figures, peers, school property, and yourself.
2. No Food / Drink or gum chewing in class.
3. Come prepared to class everyday.
4. Come to class on time.
5. Follow safety, and sanitary rules in class.

SCIENCE



Issuing of Passes:

1. Students are allowed to use Pass after first 15 minutes of class
2. Students must sign a log out/ in sheet specifying time, location
3. Restroom passes have a 1-5 minute time limit, unless certified nurse/doctor note provides other instructions.
4. Passes to other locations must be signed by an adult from destination indicating time signed.
5. No pass will be issued during last 15 minutes of class.
6. Pass privilege may be revoked when above mentioned rules have been violated.

Late Assignments:

Students are highly encouraged to submit assignments in a timely manner to maintain satisfactory to excellent citizenship. Failure to turn in assignments may result in the ineligibility to participate in field trips, team and school activities. Class folders are evaluated on a weekly basis. _____ **Parent Initials**

Make-up: Upon return, student will be given an adjusted deadline to complete missing assignments & quizzes. It is the responsibility of the student to follow-up, and complete missing work.

Scheduled dates will be set and announced for make-up tests and quizzes. _____ **Parent Initials**

Attendance: Please refer to L.P. Untalan Middle School Student handbook and planner for more details

1. **Tardies-** Students who arrive after the tardy bell, must have a signed late pass to be admitted into class to account for whereabouts.
2. **Absences-** Must have an excused slip to be admitted into class.

Excused Absences- 6 parent notes allowed for entire school year

Excuse notes should include: Child's full name, date(s) when sick, contact info, parent name & signature.

3 absences must be cleared by nurse/administrator

Make-up assignments given for excused absences.

Unexcused absences- 3-4 absences, parent is contacted

5-6 absences, letter requesting parent meeting is sent home/referred to SS Office.

7 +, truancy referral to SSO or Family Outreach Office for possible home visit.



Uniform: UMS follows the district policy for uniforms.

Board Policy 401: Schools may adopt a uniform policy consistent with the District standard operating procedure, to include appropriate physical education attire that is supported and embraced by the school community. Uniform tops are mandatory, plain black regular-fitted pants and short pants are allowed for the year until further notice.

Jaguars R.O.A.R.

Responsibility: Students will be responsible for turning in assignments, studying for tests and being prepared for class

Ownership: Students will develop a strong desire to follow school rules and teacher instructions

Academics: Students will try their best to succeed in all classes

Respect: Students will treat themselves and others with respect

Media Release- Student Media Release Statement In an effort to promote school events, your child's photo may be posted on the school website, printed in local media newspapers, and/or may be aired on local news stations in an effort to showcase the school. Should you choose to not have your child's picture released for any school event, please provide your child's grade level administrator with a note within two weeks of the beginning of the school year.

Acceptable Policy Use- All GDOE students shall use the District's technology (network, telecommunications, video, hardware, and software) in a responsible, efficient, ethical and legal manner in accordance with the vision of the District, local and federal laws, regulations, and restrictions, Guam Education Board (GEB) policies, and other applicable mandates. The use of the District's educational technology (not limited to Internet, telecommunications, hardware and software) is a privilege, which may be revoked for inappropriate behavior. Users are responsible for understanding the policy and guidelines as conditions for use. Educators and school personnel are accountable to teach and use technology responsibly.



Technology

Technology use in class: (Smartphones, tablets, etc.) Use is encouraged for educational purposes only as per Board Policy 406.

1. Students taking photos or video recording of individuals is **not allowed** in class. _____ Pls. Initial
2. Students taking photos of notes on board, experiments and items related to the lesson are permissible. _____ Pls. Initial
3. Using a device to calculate and record data is permissible _____ Pls. Initial
4. Devices need to be secured before taking exams or quizzes _____ Pls. Initial
5. Absolutely **NO TEXTING** during instructional time. _____ Pls. Initial

The teacher will not be responsible for electronic devices that are misplaced or stolen. Students are reminded to put devices away when not applicable to the lesson. **Device will be confiscated if students are identified or caught violating GDOE technology policy, school or classroom rules.** _____ Pls. Initial

***Recording on-line sessions without the permission of the teacher, consent from students and administration is prohibited.**
_____ Pls. Initial

Parent Expectations

Parents play an important part in a child's academic success. Working along with the team teachers greatly enhances the potential of a child becoming an **independent lifelong learner**. For that reason, we highly encourage parents/ guardians to:

- Be aware and **support** our expectations for students and acceptable codes of conduct mentioned above and in the student handbook.
- Have a **conversation with your child** about his/her positive behaviors within the classroom.
- Promptly **respond** to reports, letters or telephone calls from the school to provide timely input, or to address current matters.
- **Maintain consistency** in reviewing and utilizing Google Classroom Summaries, team website—great tools in corresponding between parent/ guardian and teacher.
- **Participate** in family-oriented school activities
- Regularly **attend** meetings and conferences

We need your support, active interest and participation. Together, L.P. Untalan Middle School staff and parents can encourage students to reach their maximum potential and to be the very best they can be.

By signing below, you have read and fully understand the course syllabus and are aware of class requirements and expectations. If you should have any questions please feel free to contact me through the numbers provided or via email.

Ms. Arlene P. Castro
Science Teacher – Pre-AP Jaguars, SY2021-22

Student's Name (Print) Parent/ Guardian Signature Date: _____

Contact Numbers: _____

Email Addresses: _____ Father/ Guardian _____ Mother/Guardian

Cora Elane, Date
Assistant Principal, LPUMS
Curriculum & Instruction