

# 6th Grade Science Syllabus School Year 2021-2022

**Teacher: Mrs. Florence Camacho** 



School Number: 300-2726/27

#### School Website: <u>https://ums.gdoe.net/</u>

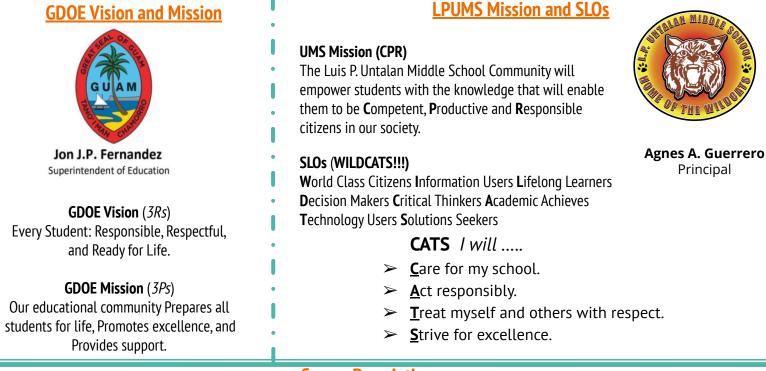
### <u>Team Lynx</u>

Team Website: https://lpumslynx.weebly.com/

#### **Teacher email**

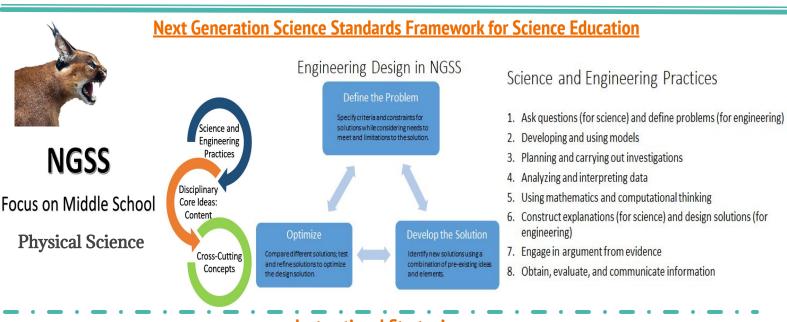
fbcamacho@gdoe.net

Classroom:
A117



#### Course Description

This 6th grade Physical Sciences class is a year long course designed to have students develop understanding of four core ideas in the physical sciences. An overarching goal for learning in the physical sciences is to help students see that there are mechanisms of cause and effect in all systems and processes that can be understood through a common set of physical and chemical principles. Students are also expected to demonstrate understanding of several engineering practices, including design and evaluation. The study of physical science is based on the core principle that most systems or processes depend at some level on physical and chemical subprocesses that occur within it. This course is broken down into 4 main sequences of study: 1) Matter and Its Interactions; 2) Motion and Stability: Forces and Interactions; 3) Energy; and 4) Waves and Their Applications in Technology for Information Transfer.



#### **Instructional Strategies**

In keeping with NGSS standards learning activity goals in the physical sciences, performance expectations at the middle school level focus on students developing understanding of several scientific practices. These include developing and using models, planning and conducting investigations, analyzing and interpreting data, using mathematical and computational thinking, and constructing explanations and using these practices to demonstrate understanding of the core ideas. Students are also expected to demonstrate understanding of several engineering practices, including design and evaluation. Teaching strategies implemented focus on STEM learning activities set to meet performance expectations as aforementioned.



\*Note: this course outline is subject to change to meet the needs of students. Coverage of subtopic content material will be adjusted to match students' pace and level of understanding.

#### Quarter 1: Matter and Its Interactions

Students explore that matter is composed of atoms and molecules can be used to explain the properties of substances, diversity of materials, states of matter, phase changes, and conservation of matter. Students also study how reacting substances rearrange to form different molecules, but the number of atoms is conserved and how some reactions release energy and others absorb energy.

- 1. Develop models to describe the atomic composition of simple molecules and extended structures. Simple Molecule Example: ammonia and methanol. Extended Structure Examples: sodium chloride or diamonds.
- Analyze and interpret data on the properties of substances before and after the substance interact to determine if a chemical reaction has occurred. Example: refraction of burning sugar or steel wool or mixing zinc with hydrogen chloride. Focus is on density, melting & boiling points, solubility, flammability, and odor.
- 3. Develop a model that predicts and describes changes in particle motion, temperature, and state of a pure substance when thermal energy is added or removed.

#### Quarter 3: Eneray (Types and Transfer of)

Students distinguish the various forms of energy and explore the changes to and from each type while explaining how energy can be tracked through physical or chemical interactions as they transfer from one object or system of objects to another. Students analyze how the relationship between the temperature and the total energy of a system depends on the types, states, and amount of matter.

- 1. Construct and interpret graphical displays of data to describe the relationship of kinetic energy to the mass of an object and to the speed of an object.
- 2. Develop a model to describe that when the arrangement of objects interacting at a distance changes, different amounts of potential energy are stored in the system. Examples: roller coaster cart at varying positions or balloon with static electrical charge.
- 3. Apply scientific principles to design, construct, and test a device that either minimizes or maximizes thermal energy transfer. Example insulated boxes, a solar cooker, a styrofoam cup.
- 4. Determine the relationship among the energy transferred, the type of matter, the mass, and the change in the average kinetic energy of the particles as measured by the temperature of the sample. Example: experiments comparing final water temperature after different masses of ice have melted or temperature changes of different materials with the same mass as they cool or heat in an environment.

#### **Ouarter 2: Motion and Stability: Force and Interactions**

Students explore the role of mass of an object must be qualitatively accounted for in any change of motion due to the application of a force. Specifically, forces that act at a distance involve fields that can be mapped by their relative strength and effect on an object.

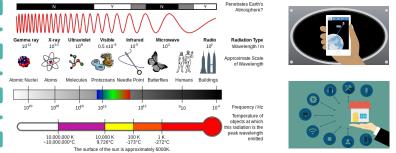
- 1. Apply Newton's Third Law to design a solution to a problem involving the motion of two colliding objects. Example: Impact of collision between two cars or a car and a stationary object.
- 2. Plan an investigation to provide evidence that the change in an object's motion depends on the sum of the forces of the object and the mass of the object.
- 3. Determine factors that affect the strength of electrical and magnetic forces. Examples of devices that use electrical and magnetic forces or the effect of the number of turns of wire on the strength of an electromagnet.



#### <u>Ouarter 4: Waves and Their Applications in</u> <u>Technologies for Information Transfer</u>

Students explore how a single wave model has a repeating pattern with a specific wavelength, frequency, and amplitude, and mechanical waves need a medium through which they are transmitted. This model can explain many phenomena, including sound and light. Waves can transmit energy. The construct of a wave is used to model how light interacts with objects. Waves can be used to transmit digital information. Digitized information is comprised of a pattern of ones and zeros.

- 1. Describe a simple model for waves that include how the amplitude of a wave is related to the energy in a wave.
- 2. Develop a model to describe that waves are reflected, refracted, absorbed, or transmitted through various materials.
- 3. Support the claim that digitized signals are a more reliable way to encode and transmit information than analog signals. Demonstrate understanding that waves can be used for communication purposes.

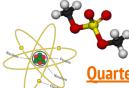


#### **Grading Policy**

 1<sup>st</sup> and 3<sup>rd</sup> Quarter (Mid-semester) will be used as a Progress Period/Grade or "Point-in-time" snapshot for each semester and NOT a summative quarter grade. Summative or Final Grades will be given at the end of 1<sup>st</sup> and 2<sup>nd</sup> semesters.

Pass (P)	Enough evidence to determine passing	
Not Enough Evidence (NE)	Not Enough Evidence to determine passing	
No Grade (NG)	No contact with student or no evidence submitted. This grade will remain until changed by teacher or school official and will NOT automatically convert to an "F" as per existing grading policy.	





#### **Grading Policy**

2. Grading for 2<sup>nd</sup> Quarter/1<sup>st</sup> Semester and 4<sup>th</sup> Quarter/2<sup>nd</sup> Semester will reflect a Standards-Based/Tiered Grading system with 6-levels classified as the following categories:

Proficiency Level	Average Scale Score	Description/Criteria
4	4.00	Exceed standard(s) expectations. Advanced understanding and application of the standard(s). In addition to demonstrating understanding and mastery of standards, content knowledge, and skills, student goes beyond what is explicitly taught or is able to apply the standard of skill to real world situations.
3	3.00-3.99	Proficient understanding of the standard(s) and progressing toward level 4. Demonstrates understanding and mastery of standard, content knowledge, and skills.
2	2.50-2.99	Approaching Proficiency: Meets partial understanding of the standard(s) and is progressing to level 3. Defines and identifies content knowledge or uses skills alone but needs help demonstrating full understanding of standard.
1	2.00-2.49	Needs Support: Meets less than partial understanding of the standard(s). Even with help, the student has difficulty performing basic skills or defining content knowledge and is well below grade level standard.
0	0-1.99	Unable to Perform: Shows no foundational knowledge, skill or prerequisite of the standard(s). Student is in need of continued support and monitoring. Even with significant help, the student is not able to perform any of the basic skills or define content knowledge.
NE		No Grade/ No Evidence available to assess student performance. No work or Not Enough Work submitted to make a final determination (see teacher comments)

#### NOTE: Increments of .5 may be used to recognize partial mastery of a level.

3. There are two allowable methods for teachers to select from in order to determine the final/composite grade for the course.

a. METHOD 1: The final/composite grade will be the average of all Priority Standards, Skills, or Topics (PSSTs).
 Step 1: A body of evidence is evaluated to determine the overall proficiency level for each PSST.
 Step 2: To determine the final/composite grade, the overall proficiency levels for all PSSTs are averaged to the nearest tenth decimal place.

b. METHOD 2: The final/composite grade will be based on overall teacher judgment.
 Step 1: A body of evidence is evaluated to determine the overall proficiency level for each PSST.
 Step 2: The final/composite grade will be based on overall teacher judgment through a review of all PSSTs taught during a grading period.

4. The final/composite grade will be converted to a letter grade using the following conversion scale:



3.6 - 4.0 = A + 3.0 - 3.5 = A 2.8 - 2.9 = B + 2.5 - 2.7 = B 2.0 - 2.4 = C + 1.5 - 1.9 = C 1.0 - 1.4 = DBelow 1.0 = F



5. To allow students and teachers to focus on the core subject areas, **report card grades will only be required for English Language Arts (Reading, Language, Spelling), Math, Science, Social Studies and CHamoru.** All other subjects will still be taught and incorporated into regular instruction, however, **final grades will only focus on the subjects noted here for SY 2021-22.** 

#### 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.

#### Citizenship and Life Readiness Skills will be reported using the following categories:

#### Progressive Disciplinary Action:



#### **<u>Citizenship Policy</u>**

Each student's citizenship is evaluated based on the rubric below. Students must exhibit at least two of the behaviors consistently in each category to warrant that evaluation.



#### E = Excellent (P3.5 - P4.0)

- Students exhibits exemplary behavior; no corrective actions taken
- Always follows school and class rules and expectations
- Completes all tasks assigned in the lesson packets

#### Needs Improvement (P1.0 - P1.5)

- Student exhibits inappropriate behavior, corrective action needed
- Inconsistently follows school and class rules and expectations
- Completes minimal amount of assigned tasks in the lesson packet

#### Satisfactory (P2.0 - P3.0)

- Students exhibits good behavior; few to no corrective actions taken
- Consistently follows school and class rules and expectations
- Completes most of the assigned tasks in the lesson packets

#### Unsatisfactory (P0.5 or below)

- Student exhibits unacceptable behavior, corrective action needed
- Disciplinary actions taken due to not following school and class rules and expectations
- Completes little to no tasks in the lesson packet.

#### **Class Conduct, Academic Integrity and Plagiarism**

Each student in this course is expected to abide by the LPUMS Student Guide to Face to Face and Online Learning Expectations. Students found to violate these expectations will be disciplined accordingly. All work submitted by a student for academic credit must be the student's own work. Submission of a copy of all or part of work done by someone else, in any form (e.g. email, Word doc, Box file, Google sheet, or a hard copy) is academic dishonesty. Should copying occur, both the student who copied work from another student and the student who gave material to be copied will both automatically receive a zero for the assignment. There will not be make-up opportunities for these instances. Violations of academic integrity during examinations will result in the failure of the exam and will lead to disciplinary action. Using the words or ideas of another as if they were one's own is a serious form of academic dishonesty. If another person's complete sentence, syntax, key words, or the specific or unique ideas and information are used, one must give that person credit through proper citation. Plagiarized work or work completed by others will not be granted credit.

#### Attendance

Attendance under both Face to Face and Online learning modalities is necessary to ensure learning and understanding occurs. If issues arise, please email the teacher ahead of time so accommodations can be made to address your needs. Online learning will be a blend of Synchronous learning (meeting all together online as a class) using Google Meet (or Zoom) at a set time with specific class attendance ID Codes given to students at the start of each session and Asynchronous (student-paced, independent learning) lesson presentations, activities, assignments, and assessments which will have set deadlines for completion.

### Make-up Work Policy

Students will be given sufficient amount of time to complete all tasks and assignments. Should more time be needed to complete a tasks or assignment, the student or parent will need to communicate with the teacher to establish a deadline extension if needed. Otherwise, all set due dates must be adhered to. Some learning activities are time-sensitive and will not be possible to make up so please communicate with the teacher to ensure understanding of skills missed due to absences or tardies.

#### Face to Face Instructional & Laboratory Supplies: LPUMS will provide your child with the Binder or folder with filler paper to following supplies via ESF funds: • 1 package of paper towels hold handouts and notes. 3 composition notebooks 1 container of hand soap • Composition Notebook for lab activity 1 pack college rule filler paper 1 package of wipes journals. 2 pocket assorted colored folders • 1 bottle of Glue and/or 1 roll of clear, Writing utensils (pen, pencil, coloring 2 pens double-sided, electrical, or masking tape. pencils, etc.). 8 count of # 2 pencils 1 package of straws (optional) 1 metric ruler (cm) 2 block erasers • Table Salt or Epsom Salt (optional) Various household supplies to 1 box of crayons or colored pencils Food Coloring (optional) ٠ conduct scientific investigations. Lists 5 fabric masks (please wash before using) Foil (optional) of specific materials will be shared ahead of each class activity. **Textbooks and Resources Online Learning Supplies:** Textbook: Prentice Hall & Globe Fearon Physical Science • Computer or Laptop to access Google Chrome and extensions (Gmail, Google Meet, Google Search, YouTube, Google Suites and Class/School Online Textbook & Workbook: CK-12 Physical Science for Websites). \*iPads and Cell Phones will not be effective. Middle School Cameras or Printers/Scanners (or other devices) that allow for the Online Resources: https://www.ck12.org/student/, completion and submission of assignments onto the learning platform. Internet Access and Zoom App. Check these websites for updates on COVID Various household materials to conduct "at-home" scientific regulations: DPHSS: <u>ttp://dphss.guam.gov/</u> and investigations and build models that represent Physical Systems. Lists of https://www.gdoe.net/District/Portal/covid-19-i specific materials will be shared ahead of each class activity. nformation Modes of Learning Descriptions

- > Traditional Face to Face Instruction: Instructional learning and attendance for students will be conducted in the classroom on a daily basis according to the school schedule. Should this model of learning result in a blended mode of face-to-face and distance (home) learning due to restrictions set by CDC and DPHSS then a cohort alternating schedule will be implemented and students will attend classes every given assigned day. Asynchronous learning assignments will be provided for days assigned for distance learning (similar to the previous Hard-Copy mode of learning) and can be uploaded onto the online learning platform if possible.
- > Online Distance Learning: Instructional activities and attendance are 100% online home learning. Students attend classes online and are required to have a computer and reliable internet access in addition to access to a printer or scanner to assist with the submission and completion of assignments onto the designated online learning platform such as Google Classroom or Schoology.

### Face to Face Classroom Rules, Procedures, and Expectations

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

- > Enter classroom as directed, quietly and quickly, while maintaining social distancing protocols.
- Enter the classroom, sanitize hands, equipment, and work area.
- Be in your seat to be dismissed when the bell rings.
- > You need a hallway pass whenever you leave the room.
- Log out before leaving the class and log in when you return.
- No eating, drinking, or chewing gum in class.
- > Use appropriate language and speech. No name calling or teasing in class. No vulgar language.
- Electronics may be approved by teacher for particular activities; phones, earbuds/Airpods should otherwise not be used.
- > No leaving class once the tardy bell rings to get materials or supplies >> Use time wisely to complete and submit assignments on you may have forgotten in another class.

- > Wear a face mask at all times in the classroom; mask breaks may be granted by the teacher (student may step outside).
- Maintain social distancing and follow guidelines.
- Students must wipe all surfaces, instructional materials after each class session.
- > All documents for signature *excuse notes, field trip* forms, hall passes, athletic contracts, monitoring forms, etc., are to be placed on the teacher's desk prior to the start of instruction. There should be no interruptions for a signature during lessons.
- time.

Always follow Lab Safety Protocols and Procedures when conducting science investigations. Experiment will have specific instructions which will need to be read PRIOR to starting the learning activity. Students found violating lab safety protocols will be asked to sit out of the activity. Parents will be notified and the only way to make up the activity is to have parental/guardian supervision.

**Classroom Protocols:** 

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

Issuing of Hallway Passes:

- 1. Passes will not issued 15 minutes after or prior to the bell.
- 2. Students must sign out and in on the class departure log.
- 3. Restroom passes have a 1-5 minute time limit, unless certified nurse/doctor note provides other instructions.
- 4. Students may be denied a hall pass if students abuse the privilege granted by the pass. Any student found disturbing other classes will not be granted future passes.

#### **Online Classroom Rules, Procedures, and Expectations**

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

- > If attending a class/lesson during a scheduled time, work in an appropriate, distraction-free space/area.
- > Remember your GDOE student email username and password and do not share it with anyone else.
- > Observe all etiquette and rules for using the internet and internet resources.
- Do not use vulgar or obscene language in any speech or writing; no bullying.
  - $\circ$   $\;$  Follow acceptable online citizenship expectations when sharing posts/comments.
- Log into Google Meet\* at least 5 minutes before scheduled online synchronous class sessions. Get the updated Meet Codes or Zoom links from your GDOE student emails. \*Zoom may be used in lieu of Google Meets should all students be able to utilize this meeting platform.
- When entering Google Meet or Zoom meetings, mute your microphones and turn on your camera. Unmute when given permission to do so.
  - Set up Dual Screens so you can observe lesson presentations and participate in in-class activities.
  - Use the Chat box to enter your name for attendance purposes and to post questions outside of the lesson presentation.
  - Students are highly encouraged to be present visibly and audibly at all assigned sessions; teacher will take attendance during online sessions.
  - $\circ$  Sign in or register using you GDOE Student emails and your full first and last names.
- Students and parents must read, sign, and submit the Online Contract and Technology User Acceptability Agreement and Log into your GDOE email and Online Classroom learning platform daily to keep informed of all shared materials, announcements, assignments, and assessments at designated times.
- All assignments and assessments will be submitted onto Google Classroom or any other school sanctioned Online Classroom Platform.
  - Upload/submit all assignment files with your full name and assignment title.
  - Students will be held to the highest standards of academic honesty. Refer to the section on Class Conduct, Academic Integrity and Plagiarism for more detailed information.
  - Violations to the above online learning etiquette will result in your removal from the online class session.
  - Progressive disciplinary action will be taken when necessary.
  - Continued violation may result in the removal from OL MOL.

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 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.
- 2. Students taking photos of notes on board, experiments and items related to the lesson is permissible.
- 3. Using a device to calculate and record data is permissible.
- 4. Devices need to be secured before taking exams or quizzes.
- 5. Absolutely NO TEXTING, SOCIAL MEDIA, OR RECEIVING PHONE CALLS during instructional time.

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 policy, school or classroom rules**.

#### Recording online sessions without the permission of the teacher and consent from students and administration is prohibited.

#### 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 <u>support</u> our expectations for students and acceptable codes of conduct mentioned above and in the student handbook.
  Have a <u>conversation with your child</u> about his/her positive behaviors within the classroom.
- Have a <u>conversation with your child</u> about his/her positive behaviors within the classroom.
   Dramatly respond to reports latters or tolophone calls from the school to provide timely input or
- Promptly **respond** to reports, letters or telephone calls from the school to provide timely input or to address current matters.
- <u>Maintain consistency</u> in reviewing and utilizing Online Classroom Platforms, emails, and the team website to establish open communication between parent/ guardian and teacher.
- **<u>Participate</u>** in family-oriented school activities.
- Regularly **<u>attend</u>** 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 the last page, 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.

#### Read, Complete, and Sign this last page then return it to the teacher as soon as possible.

By signing this document, you acknowledge that you have read and agree to the information in this syllabus provided by Mrs. Florence Camacho, 6th Grade Lynx Science Teacher for School Year 2021 - 2022. Teacher signature:

<u>Pa</u>	rent/Guardian Information	Parent/Guardian Information		
Name:		Name:		
Contact #1:		Contact #1:		
Contact #2:		Contact #2:		
Email:		Email:		
Initial	<b>COMPUTER/NETWORK ACCEPTABLE USE POLICY</b> LPUMS offers students access to computer technology and internet. Students must agree to abide by the rules of this policy in order to use the school's computers and network. The educational use of UMS computers and network should be geared towards classroom activities, assignments, communication, and career development. All students should have access to the internet through their classrooms, library, or school computer lab. Appropriate online etiquette should be conducted when you use UMS computers. (Refer to the school's website for more detailed information.)			
Initial	<b>TEXTBOOK POLICY</b> Students may be issued a textbook (whether it is issued to be taken home or used in the classroom). Students will be responsible for their issued textbook should it be damaged or lost while in their use. If a class set is provided, students must immediately report to the teacher any visible damage seen so the teacher may investigate. Parents can be charged should it be determined your child was negligent or responsible for causing the damage or loss of the textbook. (Refer to Board Policy 601 for detailed information.)			
Initial	MEDIA RELEASE To promote positive school-wide events at LPUMS, student photographs and interviews may be forwarded to various news media outlets and/or posted on our school website or team newsletters. Should you opt not to have your child's photograph taken, inform the principal and/or team teacher within 2 weeks of reviewing this document in writing.			
Initial	In keeping with the Guam Department of Educatio	ORM POLICY (REINSTATED FOR SY 2021 - 2022) on's vision statement and providing support and Board Policy 300 ecognizes that school uniforms enhance the learning environment. policy for all students.		

#### **COUNSELING - INFORMED CONSENT FORM**

	Parents/Guardians will be provided with the "Informed Consent Form," for their acknowledgement, agreement, a		
	written consent. The information consent form will serve as permission for your child to participate and receive school		
	guidance counseling services. It also provides additional information on the guidelines and the expectations to		
Initial	counseling confidentiality, as required by law and ethical standards.		

In the event you DO NOT want your child to receive school guidance counseling services, please provide a written statement, addressed to the principal, that you do not want your child to receive counseling services, the reasons, including parent/guardian signature and date.

Student's Name (Print)

Student Signature

Date



Parent/Guardian's Name (Print)

Parent/Guardian Signature

Date