**Standard 8Sa:** **The student will demonstrate an understanding of technological design and scientific inquiry, including process skills, mathematical thinking, controlled investigative design and analysis, and problem solving. (End 1st Quarter, with additional higher level skills added each quarter)**

**Standard 8Sb:** **The student will demonstrate an understanding of Earth’s biological diversity over time. (Life Science, Earth Science) (End 1st Quarter)**

**Standard 8Sc:** **The student will demonstrate an understanding of materials that determine the structure of Earth and the processes that have altered this structure. (Earth Science) (End 2nd Quarter)**

**Standard: 8Sd: The student will demonstrate an understanding of the characteristics, structure, and predictable motions of celestial bodies. (Earth Science) (End 3rd Quarter)**

**Standard 8Se: The student will demonstrate an understanding of the effects of forces on the motion of an object. (Physical Science) (End 4th Quarter)**

**Standard 8Sf: The student will demonstrate an understanding of the properties and behaviors of waves. (Physical Science) (End 4th Quarter)**

Details for these standards may be found at <http://www.dodea.edu/curriculum/science.cfm?cId=stn&stndId=sci>

The E. J. King 8th grade science course is process centered; meaning students must do \* something to demonstrate their understanding of the central concepts of science represented in each standard. A vocabulary list will be given to the students at the beginning of each quarter. By the end of the quarter, students will use the assigned words in conversational and written explanations of the phenomena central to the unit, which phenomena they found or created to observe, explore, describe, and explain appropriately using the given scientific vocabulary as well as additional vocabulary they find necessary to the task.

A student may work in groups of various sizes during the finding or creation, observation, and exploration of the phenomena in the unit, but each individual will describe and explain both orally and in writing the groups findings individually. In general, demonstrating knowledge of less than 60% of the assigned words will be graded as failing. 60% to 69% is graded “D”, 70% to 79% is graded “C”, 80% to 89% is graded “B”, and 90% or more of the words used appropriately both orally and in writing is graded “A” in accordance with DoDEA and school policy. Each unit will start with a written vocabulary pre-test/progress-check which may be repeated several times during the quarter until at least 80% mastery is demonstrated

\* “do something” in this context means doing what is commonly called a science project, experiment, lab or field activity. Not all students need to do the same experiment or demonstration, nor do they need to watch the same lectures and videos. They may choose from among the suggested ways to learn about a phenomenon, or they may choose a way they discover or create for themselves, but all activities must be approved by the teacher before the students do them. This approval is meant to minimize danger to the student and the environment, not to stifle their creativity. Safety is more important than learning.

Note: Late work (not turned in by the end of the class period on the assigned due date) will receive 90% of whatever grade is earned by the late work. Any work received after the last class of the quarter will not be graded nor will it affect the quarter and semester grade – except when late due to excused absence as defined in the Parent/Student Handbook (See below).

A student’s science grade will consist of a weighted average of their percent of mastery in the following areas:

* Most recent written test on the unit vocabulary 33%.
* Written reports including personal science journal entries, laboratory experiment and field observation reports, and any other written material created by the student 33%.
* Oral reports to the class or within the student’s learning group 33%.

Student behavior is not graded; however, actions that interfere with learning, disrupting either one’s own learning or disrupting other student’s learning, inevitably will decrease the amount of learning that occurs. Therefore, any actions that interfere with learning will be desisted and disciplinary action taken according to the school’s rules as recorded in the Parent/Student Handbook. All school rules will be enforced. For all of the school rules see <http://www.king-hs.pac.dodea.edu/docs/handbook.pdf>. For additional useful information about our school please see <http://www.king-hs.pac.dodea.edu/> and <http://www.king-hs.pac.dodea.edu/parent/parent.html> and <http://www.king-hs.pac.dodea.edu/student/student.html>.

Classroom Rules 2012 for Mr. Graham’s classes

1. All school rules will be followed within the classroom, the hallway and the school grounds.
2. When you enter Mr. Graham’s classroom, take only the notebooks, pencils, pens, and other materials that you will need from your backpack and put them at your desk. Put your, sweater, coat, backpack and everything else on the shelves on the north wall.
3. Work quietly with your table partners on the assignment written on the whiteboard or displayed on the SmartBoard.
4. When the instructor raises his hand, stop talking and stop working. Make sure everyone in your table group knows the instructor has his hand up. Give the instructor your complete attention and listen for further instruction.
5. Once the instructor has the class’s attention, everyone must continue being quiet and listening and watching the instructor until he says, “you may begin work”.
6. When you have been told, “you may begin work”, you may work as directed while conversing quietly with your table group unless otherwise instructed. All conversation during class must be focused on the assignment on which your table group is working.

Students must have a three ring binder to keep this syllabus, the Safety Contract, and all other science papers.