Curriculum Night: 8TH Grade Science

Willows Preparatory School 2017-18

Mr. Loker

I.B. Learning Aims & Goals
Students will participate in learning experiences that are aimed to: -cultivate analytical, inquiring, flexible minds that pose questions, solve problems, construct explanations and judge arguments -collaborate and communicate while performing investigations, evaluating evidence and reaching conclusions -understand and appreciate science and its implications in living and non-living environments

I.B. Learning Objectives	*I.B. Grading Criteria*
IB Learning Objectives are determined across four objective criterion in Science: Objective A – Knowing and understanding Objective B – Inquiring and designing Objective C – Processing and evaluating Objective D – Reflecting on the impact of science	Students will receive a local grade which is percentage based and letter referenced. This can be found in the student handbook. Additionally, all IB objective criterion will be assessed at least once each trimester. The success in the objective criterion is measured on a 0-8 scale. Limited competency is graded 1-2, adequate 3-4, substantial 5-6 and excellent 7-8. Further detail regarding the grade descriptors is attached. A cumulative score is calculated for each trimester using the criterion scores and this is referenced on a scale of 1-7. Further details are also attached.

The following is an outline of the units that will be covered throughout the each trimester. Underlying approaches for each unit involve independently and collaboratively investigating issues through research, observation, and experimentation.
Trimester 1
Protists & Fungi: What are they and how do they affect an environment? **Fulbright Partnership w/ Mr. Razem*
Plant Processes and Reproduction: What processes enable plants to survive and reproduce?
Communication in Organisms: How do nervous and endocrine systems help maintain the body's homeostasis?
Trimester 2
The Periodic Table: How is the periodic table used to classify and provide information about known elements?
Elements and Chemical Bonds: How do elements join to form chemical compounds?
Chemical Equations and Reactions: What happens to atoms and energy in a chemical reaction?
Trimester 3
Mixtures, Solubility and Solutions: What are solutions and how are they described?
Carbon Chemistry: What is carbon's role in the chemistry of living things?
Nuclear Chemistry: What forms of radiation are emitted through radioactive decay?