Dominican International School Kaohsiung

Course Syllabus

Subject: Physical Science Grade: 8 SY: 2023 - 2024
Teacher: Mr. Wilson Email: awilson@disk.kh.edu.tw

Course Description:

This course introduces the general principles of physics and chemistry. Topics include measurement, motion, Newton's laws of motion, momentum, energy, work, power, heat, thermodynamics, waves, sound, light, electricity, magnetism, and chemical principles. Upon completion, students should be able to demonstrate an understanding of the physical environment and be able to apply the scientific principles to observations experienced.

Course Requirements:

- The course will be conducted through lectures, cooperative learning, discussions, practice material, projects, and student presentations. Students are strongly encouraged to raise questions and make comments in class. Participation is the key to success.
- Assignment books are available to each student. If there is difficulty in completing the assignments, the teacher must be notified before class the next day.
- Students are encouraged to communicate concerns to teachers and ask for help as needed throughout the school year.
- Students are expected to organize their own class materials and to keep their work neat and tidy. Parents are encouraged to help students by labeling personal items with identification stickers with the student's name in English.
- Students will observe all school policies as outlined in the DISK Handbook. This includes arriving at school on time, abiding by the dress code and speaking only English on the school grounds.
- Students will observe all school policies on Academic Honesty, as outlined in the DISK Handbook. All cases of academic misconduct (such as cheating on tests or plagiarism) will automatically result in a "Fail" grade for the assignment, in addition to any sanctions that may be imposed by the School Discipline office.

Textbooks:

Holt McDougal, Science Fusion: Physical Science, Modules H-J, 2017.

Homework Policy:

Homework is to be turned in before class on the day that it is due. Late submissions will be penalized a letter grade for each day that it is late for three days. After the third day, homework will no longer be accepted and the grade will be recorded as a zero.

Students must notify the teacher of any late work being submitted. It is not the responsibility of the teacher to find late submissions.

Test Policy:

All tests must be taken home and signed by a parent or guardian the day it is graded and handed back to the student. The student has until the next morning at 8:00am to resubmit parent signatures. If a student identifies an error in grading, it must be presented by this time.

Attendance Policy:

Students must be in the classroom by the time the bell rings. If a student is absent, please consult the Google classroom for missed assignments. Missed assignments can be turned in one day late for each day absent.

Classroom Expectations:

1. Be prepared to learn.
2. Participate in class discussions, projects, and classwork.
3. Respect yourself, your peers, and the school.
4. Be careful with school property.
5. Follow all Lab safety rules and instructions carefully.

Class Materials Required:

1. Stationery items (pens, pencils, etc)
2. Textbook
3. Notebook

Assessment:

10% Deportment
30% Class Participation, Homework, Minor Projects
30% Unit Tests & Major Projects
30% Quarter Exam/Assessment

QUARTERLY PACING GUIDE

G8 Science QUARTER 1	Unit and Lesson Targets Textbook H: *Matter & Energy*
Week 1	Introduction to the class, rules, procedures; Introduction to Matter
Week 2	Properties and Changes of Matter
Week 3	Classification of Substances; States of Matter
Week 4	Changes of State; Unit 1 Review
Week 5	Unit 1 Test; Energy Basics
Week 6	Thermal Energy and Heat Transfer
Week 7	Energy Production Methods and Environmental Effects
Week 8	Unit 2 Review and Test / Quarter 1 Review
Week 9	Quarter 1 Exam

G8 Science QUARTER 2		Unit and Lesson Targets Textbook H: *Matter & Energy* (cont'd)
W1	Week 10	Q1 Exam Review; Atoms and Intro to the Periodic Table
W2	Week 11	The Periodic Table and Chemical Bonding
W3	Week 12	Unit 3 Review & Test
W4	Week 13	Chemical Reactions and Equations
W5	Week 14	Organic Chemistry
W6	Week 15	Nuclear Fission and Fusion; Unit 4 Test
W7	Week 16	Intro to Solutions; Acids, Bases, Salts, and pH
W8	Week 17	Unit 5 Test and Quarter 2 Review
W9	Week 18	Quarter 2 Exam
W10	Week 19	School Activities / Christmas

G8 Science QUARTER 3		Unit and Lesson Targets Textbook I: *Motion, Forces & Energy*
W1	Week 20	Welcome back!
W2	Week 21	Intro to Motion, and Acceleration
W3	Week 22	Intro to Forces, and Gravity
W4	Week 23	Fluid Pressure and the Buoyant Force
W5	Week 24	Work, Power, Kinetic and Potential Energies
W6	Week 25	Unit Review and Test
W7	Week 26	Electricity, Charge, and Current
W8	Week 27	Electrical Circuits, Magnetism, Electronics, and Unit Test
W9	Week 28	Quarter 3 Exam

G8 Science QUARTER 4		Unit and Lesson Targets Textbook J: *Sound & Light*
W1	Week 29	ITBS
W2	Week 30	Wave Properties and Behavior
W3	Week 31	Sound Waves
W4	Week 32	Sound Technology and Unit Test
W5	Week 33	Electromagnetic Spectrum
W6	Week 34	Light Interaction
W7	Week 35	Mirrors, Lenses, and Sight
W8	Week 36	Light Technology, Unit Test, and Quarter 4 Review
W9	Week 37	Quarter 4 Exam
W10	Week 38	End of year activities / Graduation