

Tokyo International Progressive School

Grade 7 Science

Course Outline 2026-2027

Ms. Aki Takeuchi, Room 22



“Energy cannot be created or destroyed, it can only be changed from one form to another.”- Albert Einstein

COURSE DESCRIPTION:

In this course, students will develop their understanding of the core ideas in the physical sciences by building off of concepts learned in elementary school and applying new skills to help with the understanding of higher level scientific content. Students will be given the opportunity to use models, conduct investigations, and interpret data to construct explanations and apply mathematical thinking.

The course consists of eight units:

- 1) Energy: kinetic, potential, thermal energy
- 2) Energy transfers
- 3) Structures and Properties of Matter
- 4) Chemical Processes and Equations
- 5) The Chemistry of Materials
- 6) Forces and Motion
- 7) Electric and Magnetic Forces
- 8) Waves and Information Transfer

STUDENT EXPECTATIONS:

- Students are required to bring their pencil case, water bottle, laptop, and folder. Books are to be kept inside the classroom. Students may not eat food during class.
- Students may bring materials needed for accommodations (e.g. noise-cancelling earbuds, fidget) if applicable.
- Once students enter the classroom, they are expected to sit quietly and wait for the instructions for the day.
- Students will be given worksheets and online resources to learn specific concepts.
- When in use, laptops will remain on the desk. Students must remain on the learning websites instructed by their teacher and not on other inappropriate websites.
- If a student is unable to complete work by the expected due date, the grade will be a 0 on Quickschools until the work is completed. The student and the teacher will set a new due date together. If the assignment is not completed by the new due date, the grade will remain a 0 in Quickschools and will not be able to be changed.
- Students are expected to follow 6Ps and teacher's instructions at all times. Any misbehavior will not be tolerated.

GRADE:

6P Positive/pleasant/polite behaviors articulated how members of the TIPS community are expected to treat each other. Prepared/punctual/productive behaviors guarantee academic success.	10%
Daily Work Daily work is anything students complete in class and directly linked to the objective for the lesson.	25%
Quizzes Short assessments between 5-10 questions, taking 15-30 minutes to complete. Quizzes are formative assessments used to check students' progress throughout the course.	20%

Project Assignments are longer tasks, designed to practice skills including research, organization, group work, and presentation. Projects will usually take more than one class period to complete and will involve completing some of the work outside of class time.	25%
Test Progress Tests are summative assessments given at the end of a unit and cover all the material learned in that unit.	20%

The grading scale for this course will be:

Letter Grade	Mark Range	Grade Points
A+	98-100	4.0
A	93-97	4.0
B+	90-92	3.5
B	85-89	3.0
C+	82-84	2.5
C	77-81	2.0
D+	74-76	1.5
D	70-73	1.0
F	69 or below	0.0

IMPORTANT DATES:

* Schedule is subject to change

Assessment	Date
Energy: kinetic, potential, thermal energy	Mid-September
Energy transfers	Mid-October
Structures and Properties of Matter	Early December
Chemical Processes and Equations	Mid-January
The Chemistry of Materials	Mid-February
Forces and Motion	Late March
Electric and Magnetic Forces	Early May
Waves and Information Transfer	Early June

IMPORTANT:

Students will be assessed with quizzes after each lesson on a weekly basis and progress tests or projects on a monthly basis. Students may also be required to work on longer project assignments involving researching and writing skills. Projects will take several lessons to complete and will be scheduled at least once per quarter.