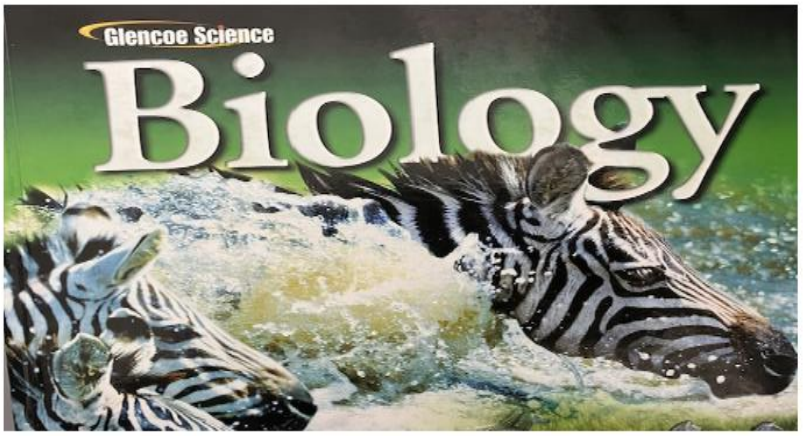
Tokyo International Progressive School

Grade 12 -BIOLOGY -Course Outline 2025-2026

Mrs .Priya Pillai, Room 35



DESCRIPTION OF THE COURSE

This course will provide a foundational understanding of biology and chemistry, focusing on the structure and function of cells, including how they communicate and reproduce. Topics will include energy conversions, genetics and gene expression, genetic engineering, the origin of life, changes in organisms, ecosystems and succession, environmental challenges and solutions, and the classification of living things.The textbook for this course is **Glencoe Science Biology**.

Student Expectations:

Students are required to bring the following materials to each class:

- Pencil
- Eraser
- Ruler
- Pen
- Laptop (only to be used when instructed)
- Scientific calculator
- Headphones (only to be used when instructed by the teacher)
- Agenda
- Science binder or notebook
- Relevant textbook
- Completed assignments or work due
- Worksheet folder
- Pair of scissors
- Glue stick
- Color pencils

Additional Rules:

- No cell phones/mobile phones are allowed in the science lab.

Teacher's Expectations:

- Enter the class before the bell rings.
- Do not enter the science lab without permission.
- Wait outside if a class is still in session—do not barge in.
- Bring only your study materials to class and have them ready on your desk.
- Keep personal belongings in your bag and store them in the locker assigned to you.
- Bring your own textbook (with the allotted number) only when instructed by the teacher.
- Use your agenda daily to record homework assignments and/or reminders.
- Daily work and worksheets will be assessed and marked.

- Late submissions of worksheets, home assignments, or projects will initially be marked as zero. The mark may be changed upon submission of the assignment.
- Missed Tests: If you miss a test without notifying the school/teacher at least one week in advance or without providing a note explaining your absence, you will receive a zero. There is no option to retake the test.
- Textbook Responsibility: A textbook will be issued to each student on the first day of school. If the textbook is not returned in usable condition by the required date, your family will be responsible for the cost of a replacement.
- Eating and drinking in the science lab is strictly prohibited.
- The class will follow the school's 6Ps expectations and students are expected to work to the best of their ability.
- If there are any issues or problems affecting your ability to participate in class, you must communicate with the teacher before class starts (e.g., talk to, email, or write a note) to arrange necessary accommodations.
- Restroom Breaks and Water: Students should use the restroom and fill their water bottles before class begins.
- Final Week of the Semester: No late or missing work will be accepted one week before the end of the semester to allow sufficient time for grading and submission into Quickschools.
- Students are responsible for keeping track of their grades and missing assignments, and should speak with the teacher about any concerns.
- If you are struggling or need help, it is your responsibility to ask the teacher for assistance or request extended time before the assignment's due date. Last-minute requests may not be accommodated.
- Students needing additional help or practice on a topic/assignment, or those who need to catch up with the class, are encouraged to join WIN for additional support. Please speak with the teacher before attending WIN to ensure availability. Parents will be informed accordingly.
- Regular revision at home is expected to achieve the best grades.
- Each lesson will conclude with a quiz in MCQ format.
- Each quarter will end with a progress test.
- Each quarter will include one individual project.
- Daily Work Assessment: Classwork will be marked based on classroom interaction, timely submission of worksheets, and classroom written work.
- Students are to respect themselves, each other, and their environment.

The above expectations will be read out in class at the beginning of the academic year and revisited every quarter to ensure the smooth functioning of the classes throughout the year.

EARNING YOUR GRADE

Your grade will be determined by your work in these categories:

Category	**Percentage of your Grade**
Daily work	30%
Quiz	20%
Project	30%
Progress Test	20%

THE GRADING SCALE FOR THIS COURSE WILL BE:

Letter Grade	**Range of Marks**
A+	98 to 100
A	93 to 97
B+	90 to 92
B	85 to 89
C+	82 to 84
C	77 to 81
D+	74 to 76
D	70 to 73
F	69 or below

Project submissions dates

Term 1	October 20th 2025
Term-2	January 14th 2026
Term-3	March 31st 2026
Term-4	June 1st 2026

IMPORTANT ESTIMATED DATES			
LESSON	**NAME OF THE LESSON**	**PROGRESS TEST**	**DATE**
CHAPTER-1	THE STUDY OF LIFE	Progress Test-1 Lesson 1 to Lesson 9	**October 21st**
CHAPTER-2	PRINCIPLES OF ECOLOGY		
CHAPTER-3	COMMUNITIES,BIOMES, AND ECOSYSTEMS		
CHAPTER-4	POPULATION ECOLOGY		
CHAPTER-5	BIODIVERSITY AND CONSERVATION		
CHAPTER-6	CHEMISTRY IN BIOLOGY		
CHAPTER-7	CELLULAR STRUCTURE AND FUNCTION		
CHAPTER-8	CELLULAR ENERGY	**Progress Test-2** Lesson 10 to Lesson 19	**January 15th**
CHAPTER-9	CELLULAR REPRODUCTION		
CHAPTER-10	SEXUAL REPRODUCTION AND GENETICS		
CHAPTER-11	COMPLEX INHERITANCE AND HUMAN HEREDITY		
CHAPTER-12	MOLECULAR GENETICS		
CHAPTER-13	GENETICS AND BIOTECHNOLOGY		
CHAPTER-14	THE HISTORY OF LIFE		
CHAPTER-15	EVOLUTION		
CHAPTER-16	PRIMATE EVOLUTION		
CHAPTER-17	ORGANIZING LIFE'S DIVERSITY	**Progress Test-3** Lesson 20 to Lesson 27	**April 2nd**
CHAPTER-18	BACTERIA AND VIRUSES		
CHAPTER-19	PROTISTS		
CHAPTER-20	FUNGI		
CHAPTER-21	INTRODUCTION TO PLANTS		
CHAPTER-22	PLANT STRUCTURE AND FUNCTION		
CHAPTER-23	REPRODUCTION IN PLANTS		
CHAPTER-24	INTRODUCTION TO ANIMALS		
CHAPTER-25	WORMS AND MOLLUSKS		
CHAPTER-26	ARTHROPODS		
CHAPTER-27	ECHINODERMS AND INVERTEBRATE CHORDATES	**Progress Test-4** Lesson 28 to Lesson 37	**June 3rd.**
CHAPTER-28	FISHES AND AMPHIBIANS		
CHAPTER-29	REPTILES AND BIRDS		
CHAPTER-30	MAMMALS		
CHAPTER-31	ANIMAL BEHAVIOR		
CHAPTER-32	INTEGUMENTARY ,SKELETAL, AND MUSCULAR SYSTEMS		
CHAPTER-33	NERVOUS SYSTEM		
CHAPTER-34	CIRCULATORY, RESPIRATORY, AND EXCRETORY SYSTEMS		
CHAPTER-35	DIGESTIVE AND ENDOCRINE SYSTEM		
CHAPTER-36	HUMAN REPRODUCTION AND DEVELOPMENT		
CHAPTER-37	IMMUNE SYSTEM		

Disclaimer-Please note- Dates may be subject to change.