

St. Francis' Canossian College
Integrated Science (2003-2004)
Introduction (Students)

1. Objectives of the new curriculum

A. Knowledge

Students should be able to understand scientific ideas, concepts and theories about the following topics: Water, Cells and living things, Energy, Heat transfer, Matter.

B. Skills

Students should be able to demonstrate generic skills:

- (1) Collaboration skills
 - to work with students harmonically
 - to divide the work effectively
 - to solve problem arising from group interaction and group learning
- (2) Communication skills
 - to express oneself verbally
 - to hold and conduct discussion efficiently
 - to present in groups and in class
 - to express ideas effectively in self reflection and written report
- (3) Information Gathering skills.
 - to search and extract relevant materials from internet, library or other sources e.g. newspaper, books / magazine
- (4) Investigative skills
 - to propose hypotheses and devise methods for testing them
 - to plan and conduct scientific investigations effectively
 - to measure and present data accurately
 - to evaluate the results and the fairness of test, and draw conclusions based on findings
- (5) Information Technology (IT) skills
 - to use internet search, WORD, EXCEL, powerpoint presentation effectively

C. Values and Attitudes

Students are expected to:

- (1) maintain curiosity and continued interest in science
- (2) be aware of the importance of the safety of oneself and others in the

- laboratory and be committed to safe practices in daily life.
- (3) appreciate the wonders of Nature and show respect and care for all forms of life.
 - (4) be critical towards evidence, hypotheses and experiments
 - (5) develop open-mindedness, be able to show tolerance and respect towards different opinions, viewpoints, and people with different beliefs and value systems.

2. Structure

- Teachers and Venue

Teachers	Venues

- Scheme of work:

Unit	Topic	IT/ Presentation/ Library skills	No. of T
1	Understanding the Laboratory	Library search	1 st T
2	Water as a solvent		
3	Water cycle	Internet search. WORD, EXCEL	
4	Microscope & Living things		
5	Water Purification	Presentation	
Mid-Term Examination			
6	Project Learning	Powerpoint	2 nd T
7	Matter (+Heat Transfer)		
8	Energy		
Final Examination			

3. Teaching materials

- Science Textbook (*Living Science Book 1B*, Longman)
- Notes & IT materials (A4 files)
- Exercise Book x 2

4. Assessment

Written examination (40%)	Science concepts & investigative skills
CAS (60%)- 1 st Term	- small projects - assignments - dictation & quizzes - self reflection - practical examination
CAS (60%)- 2 nd Term	- Project Learning (process & products: written report and presentation)[40%] - assignments - dictation & quizzes - practical examination

- Students are strongly advised to take an active part in class.
- Bonus marks will be given to students who can complete the extra assignments for each topic. eg. further reading, challenging exercises