



ST. LAWRENCE HIGH SCHOOL

A JESUIT CHRISTIAN MINORITY INSTITUTION



Syllabus Planner for the year 2021

TERM: FIRST TERM

TEACHER'S NAME: NILANJANA BHADRA AND SOUMITRA MAITY

No. of working days :- 71

Subject: PHYSICS

CLASS: X

SECTION: A,B,C & D

MONTH	LESSONS	TOPICS COVERED	HOMEWORK	CLASS WORK
JANUARY	Behaviour of gases	Boyle's law, Charles law, Avogadro's law, Avogadro's number, Ideal gas, Ideal gas equation, Gay-Lussac's law.	Selected questions and numericals from the subtopics covered.	Concepts related to all the subtopics will be discussed and different types of numericals will be solved.
FEBRUARY Topic for Physics project will be declared	Behaviour of gases continued	Kinetic theory of gases. Behaviour of gas at molecular level.	Selected questions and numericals from the subtopics covered.	Concepts related to all the subtopics will be discussed and different types of numericals will be solved.
	Thermal Phenomena	Thermal expansion – linear, superficial, volume	Selected questions and numericals from the subtopics covered.	Concepts related to all the subtopics will be discussed and different types of numericals will be solved.
	Physics project topic : Estimation of domestic electrical energy consumption.			The method of doing the project will be discussed in class.
MARCH	Thermal Phenomena continued	Thermal conductivity, Thermal resistivity	Selected questions and numericals from the subtopics covered.	Concepts related to all the subtopics will be discussed and different types of numericals will be solved.
	Last date of submission of Physics project is 30th March (30.03.2021)			
APRIL 1 st term exam begins on 16 th April	Revision of Behaviour of gases and Thermal Phenomena	Combined form of Boyle's and Charle's law and numerical based on that. Thermal expansion coefficients and their inter-relationship.	Selected home work will be given from the revision lessons.	Previous year questions will be discussed.
	Syllabus for the 1st Term : Behaviour of gases and Thermal Phenomena			

Teachers are requested to prepare a LESSON PLAN for each Topic to be taught. The Lesson plans are to be submitted along with the monthly planner.

Signature of Teachers : *Nilanjana Bhadra* 15/3/21, *Soumitra Maity* 15.03.21

Submitted on : 15.03.21

PRINCIPAL

ACADEMIC COORDINATOR

VICE PRINCIPAL

Soumitra Maity 15/03
Nilanjana Bhadra 15/3/2021



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Syllabus Planner for the year 2021

TERM: PRE TEST

TEACHER'S NAME: NILANJANA BHADRA AND SOUMITRA MAITY

No. of working days :- 56

Subject: PHYSICS

CLASS: X

SECTION: A,B,C & D

MONTH	LESSONS	TOPICS COVERED	HOMEWORK	CLASS WORK
MAY	Light	Reflection at spherical mirror – convex and concave. Refraction of light – laws, Laws of refraction Refractive index Deviation – glass slab and prism	Selected questions and numericals from the subtopics covered.	Concepts related to all the subtopics will be discussed and different types of numericals will be solved
JUNE	Light Continued	Lenses – convex and concave, relative terms Human eye – structure and defects Dispersion, Light wave, Scattering	Selected questions and numericals from the subtopics covered.	Concepts related to all the subtopics will be discussed and different types of numericals will be solved
	Current electricity	Coulomb's law. Potential difference, emf Ohm's law and Resistance. Resistivity, conductivity & combination of Resistances.	Selected questions and numericals from the subtopics covered.	Concepts related to all the subtopics will be discussed and different types of numericals will be solved
JULY	Current electricity Continued	Heating effect of current. Power, power ratings. Domestic circuit. Electromagnetism, electromagnetic induction. AC generator and motors.	Selected questions and numericals from the subtopics covered.	Concepts related to all the subtopics will be discussed and different types of numericals will be solved
	<u>Revision</u> : Light and Current electricity	Image formation in mirrors and lens. Equivalent resistance and electromagnetic induction.	Selected home work will be given from the revision lessons.	Previous year questions will be discussed.
AUGUST	Syllabus for the Pre- Test : Behaviour of gases, Thermal Phenomena, Light and Current Electricity			
Pre Test begins on 5 th August	Atomic Nucleus	Concept of mass defect and nuclear binding energy. Radioactivity and its origin.	Selected questions and numericals from the subtopics covered.	Concepts related to all the subtopics will be discussed and different types of numericals will be solved

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Signature of Teachers :

Nilanjana Bhadra 15/3/21
Soumitra Maity 15.03.21

Submitted on : 15.03.21

PRINCIPAL

ACADEMIC COORDINATOR

VICE PRINCIPAL

Shrawan Kumar 15/03
Zinola 15/3/2021



FOR GOD AND COUNTRY

ST. LAWRENCE HIGH SCHOOL

A JESUIT CHRISTIAN MINORITY INSTITUTION

TERM: SELECTION TEST



TEACHER'S NAME: NILANJANA BHADRA AND SOUMITRA MAITY

Syllabus Planner for the year 2021

No. of working days :- 72

Subject: PHYSICS

CLASS: X

SECTION: A,B,C & D

MONTH	LESSONS	TOPICS COVERED	HOMEWORK	CLASS WORK
SEPTEMBER	Atomic Nucleus Continued	Nature of α , β and γ rays. Nuclear reaction. Fission and Fusion.	Selected questions and numericals from the subtopics covered.	Concepts related to all the subtopics will be discussed and different types of numericals will be solved
	Concerns about our environment	Structure of the atmosphere, The ozone layer, Greenhouse effect. Rational use of energy.	Selected questions and numericals from the subtopics covered.	Concepts related to all the subtopics will be discussed.
OCTOBER	<u>Revision:</u> Behaviour of gases and Light	Boyle's and Charle's law and the combined form. Image formation by lens.	Selected home work will be given from the revision lessons.	Previous year questions will be discussed
NOVEMBER	<u>Revision:</u> Current electricity, Thermal phenomena	Combination of resistances and electric power. Faraday's law and Lenz's law. Expansion of solid liquid and gas.	Selected home work will be given from the revision lessons.	Previous year questions will be discussed
DECEMBER	<u>Revision:</u> Atomic Nucleus	Nuclear reaction.	Selected home work will be given from the revision lessons.	Previous year questions will be discussed
Syllabus for the Test : Behaviour of gases, Thermal Phenomena, Light, Current Electricity, Atomic Nucleus and Concerns about our environment				

Teachers are requested to prepare a LESSON PLAN for each Topic to be taught. The Lesson plans are to be submitted along with the monthly planner.

Signature of Teachers : *Nilanjana Bhadra* / 15/3/21, *Soumitra Maity* / 15.03.21

Submitted on : 15.03.21

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Nilanjana Bhadra
15/03/21

Soumitra Maity
15/03/21