

DINABANDHU MAHAVIDYALAYA

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NAAC ACCREDITED-2016(2nd cycle)
Affiliated to West Bengal State University & Formerly under University of Calcutta
Registered under 2(f) & 12(B) of U.G.C. Act 1956
ESTD: 1947

Value Added Course on Sky watching

By

Department of Physics

Session: 2021-22

Course Objective:

Sky watching, an activity as ancient as humanity itself, is a practice that continues to captivate us. Its allure lies not only in its aesthetic beauty but also in the mysteries it holds, providing a vast canvas for scientific exploration and philosophical contemplation.

Scientific Significance


Sky watching has immense scientific significance. Sky watching is a gateway to scientific exploration. Astronomers scrutinize the sky to understand celestial bodies and phenomena, contributing to our knowledge of the universe. Observing the night sky offers a direct connection to the cosmos and its mysteries. From the motion of planets to the lifecycle of stars, the sky is a real-time laboratory for astronomical phenomena. For example, tracking the movement of constellations can provide insights into Earth's rotation and revolution. Similarly, observing meteor showers or solar eclipses can offer practical understanding of these celestial events. The study of meteorological patterns, vital for predicting weather and understanding climate change, also relies heavily on sky watching.

Philosophical Implications

Beyond the scientific realm, sky watching has profound philosophical implications. The vastness of the sky prompts us to reflect on our place in the universe, fostering a sense of humility and perspective. It reminds us of the grandeur of existence beyond our immediate surroundings and experiences.

Course Outcome:

- ❖ Students can be able to identify bright, naked eye stars and constellations.


Biswajit Ghosh
Principal
Dinabandhu Mahavidyalaya
Bongaon, 24 Pgs (N)

- ❖ Students can be able to assemble, use and disassemble the various types of telescopes available for their use
- ❖ Students can be able to identify, classify and compare the bodies of our solar system.
- ❖ Students can recognize and explain the movements of the Sun, Moon and planets, as viewed from Earth, over the course of time.
- ❖ Students can be able to examine and critique both the geocentric and the heliocentric models of our solar system and explain them within a historical perspective
- ❖ Students can be able to explain the production, transmission, refraction and reflection of electromagnetic radiation and the detection of this radiation by both Earth-based and space-based instruments.
- ❖ Students can be able to identify, classify and compare the stars
- ❖ Students can be able to identify, classify and compare the objects in the Universe, including, but not limited to; atoms, nebulae, stars, stellar clusters, galaxies, clusters of galaxies, quasars.

General informations:

- Start Date: 07.12.2021
- Duration: Theory Class 2hrs, Practical Class: 4 hrs
- Entry Qualification: Honours and generals students of pure science
- Language: English/Bengali
- Venue: DinabandhuMahavidyalaya, Bongaon
- No of students: 60

Course Curriculum

Topic	Class number	Hours
Introduction to Sky watching	1	2
Telescope and its working	2	4
Our Solar System	1	2
Supernova explosion	2	4
Plasma in Universe	2	4
Sky watching Practical	6	24

Principal: Dr. Biswajit Ghosh

IQAC coordinator: Dr. Zenith Roy

Those who are interested may contact to the Head of the Department for enrollment of their name.

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Co-ordinator, IQAC
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