

Astrobiology Club

Sessions Overview

Through a series of entertaining and educational workshops, based on practical hands-on experiences, this course is designed to give an appreciation of how Astronomy and Biology contribute to our understanding of how our world works, through the medium of Photography/Imaging and for pupils to gain an insight into a range of related careers.

Breakdown of Sessions for the Astrobiology Workshops:

Session 1: Introduction to Geophysics

Learning opportunities include:

- What is Ecology?
- The scale of Ecology
- Why is it important to us?

Session 2: Global Climate Modules

Learning opportunities include:

- Heat, temperature and Light
- Physical Environments
- Climate
- Nature Photography

Session 3: Meteorology

Learning opportunities include:

- What is 'Weather Systems and Models'?
- Climate Change
- Atmospheric Boundary Layer
- Circulation Patterns
- Heat Transfer (Radiative, Convective and Latent)

Session 4: Oceans and Land Surface

Learning opportunities include:

- Vegetation
- Land Use and Topography
- The atmosphere connected with Oceans
- Documentary Photography

Session 5: Magnetic Fields

Learning opportunities include:

- Gravitational Fields
- Composition and Colour
- Magma and Volcanism
- Ionosphere

Session 6: Heat Flow

Learning opportunities include:

- Gravity
- Reflections and Refractions
- Magnetism
- Street Photography – How humans interact with their surroundings

Session 7: Natural Hazards

Learning opportunities include:

- Fluid Dynamics
- Oceanography
- Meteorology
- Mineralogy

Session 8: Atmospheric Science

Learning opportunities include:

- Environmental Problems
- Geosciences
- Volcanoes

Session 9 and Session 10: Hydrology

Learning opportunities include:

- Water Cycles
- Landscape Photography
- Global Warming
- Lakes, Rivers and Oceans