

QEF Project 2007/0471
Development of Learning and Teaching Resources in ‘Astronomy and Space Science’
Elective Module in New Senior Secondary Physics Curriculum
Outline of Investigations

Investigations	Methods	Deliverables
1. Change in distance between the Earth and the moon with time	Photograph the moon and find the distance to the moon. Repeat this for at least a few days.	A written report and a presentation with a graph of distance against time.
2. The origin and evolution of lunar features	Photograph various regions of the lunar surface and learn the formation and evolution of the features by extensive reading.	A written report and a presentation with pictures of various parts of the moon and descriptions of their evolution.
3. Change of the moon in one night	Photograph the full moon periodically for at least half of a night, investigating the change in colour, size, shape and brightness of the moon quantitatively.	A written report describing various changes and a presentation with appropriate animations illustrating the changes.
4. Solar phenomena	Photograph pictures of special features on a solar surface and learn about their nature by extensive reading.	A written report and a presentation with pictures of solar features and descriptions of their nature.
5. Sun in multiple wavelengths	Monitor the change in the size and shape of sunspot by photographing the sunspot for a few consecutive days.	A written report and a presentation describing the change in sunspot both quantitatively and qualitatively.
6. Measurement of the rotational rate of the sun	Find the rotational rate of the sun by photographing the solar disk for a few consecutive days.	A written report and a presentation describing the methodology and results.