



Making a Monocular (SCIP1061)

Introduction

In the Age of Sail from the 16th to the 19th century, the monocular telescope was a necessity for sailors. Do you know how a monocular telescope works? How far can you see with a monocular telescope? If you want to know the answers, why don't you make one yourself? This course aims at providing students with some knowledge of light through experiments in optics. For instance, the properties of light and different types of lens will be introduced. Having acquired such knowledge, students will apply it to make monocular telescopes. A powerful monocular makes the invisible visible.

Programme Type / Level

Optics (Level 1) ([Token-required](#)) (Elective Programme)

Instructor(s)

Ms. Leung Kin Yi Promail, Physics Panel chairperson of Stewards Ma Kam Ming Charitable Foundation Ma Ko Pan Memorial College (This programme is co-organized with Stewards Ma Kam Ming Charitable Foundation Ma Ko Pan Memorial College)

Target Participants



- P4 to P6 HKAGE student members
- Class size: 25

* Priority will be given to student members who are in Mathematics and Sciences domain

Medium of Instruction



Cantonese with Chinese Notes

Certificate



Certificate will be awarded to participants who have:

- ❖ Attended **AT LEAST 3** sessions AND
- ❖ Completed all the assignments with satisfactory performance

Intended Learning Outcomes



Upon completion of the programme, participants should be able to:

1. Investigate the properties of light via optics experiments;
2. Investigate different types of lenses via optics experiments;
3. Find the focus of the lens experimentally;
4. Explain the principle of simple telescope with optics concepts;
5. Create and decorate their own telescope.

Screening



Please answer the screening question in the online application form.

*The screening question is designed to help the applicant understands the course level and the course content. The question must be answered by the student applicant and it can only be attempted once. The answer cannot be changed once the application is submitted. Selection is based on students' performance in answering the question. Only students who can demonstrate motivation and analytical thinking in the screening question can be enrolled in the programme.

Application Deadline

12 October, 2015

Application Result Release Date

16 October, 2015

Student members may withdraw from the programme on or before the deadline. Otherwise, the token will be deducted.

Schedule



Session	Date	Time	Venue
1	28 Nov	9:30 a.m. – 12:30 p.m.	Stewards Ma Kam Ming Charitable Foundation Ma Ko Pan Memorial College Physics Laboratory
2	5 Dec		
3	12 Dec		

Address: 17 Shek Pai Tau Road, Tuen Mun, N.T. ([Map](#))

Enquiries



For enquiries, please contact us at 3940 0178 or 3940 0102.