



STEM your Monocular (SCIP1061A)

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](#))

Instructor(s)

Ms. Leung Kin Yi Promail

Pre-requisite

No special prerequisites are needed

Target Participants



- P4 – P6 HKAGE student members
- Class size: 30

Medium of Instruction



Cantonese with Chinese handouts

Certificate



E-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 understand 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 the basic knowledge of Physics in the screening question can be enrolled in the programme.

Application
Deadline

6 May 2019
12:00 n.n.

Application Result Release Date 17 May 2019

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

Schedule



Session	Date	Time	Venue
1	25 Jul	9:30 a.m. – 12:30 p.m.	Physics Laboratory, Stewards Ma Kam Ming Charitable Foundation Ma Ko Pan Memorial College ¹
2			
3	26 Jul	1:30 p.m. – 4:30 p.m.	
4			

¹ Address: No. 17, Shek Pai Tau Road, Tuen Mun, N.T. ([Location](#))

Course Note

 香港資優教育學苑
The Hong Kong Academy for Gifted Education

與香港資優教
育學院合辦

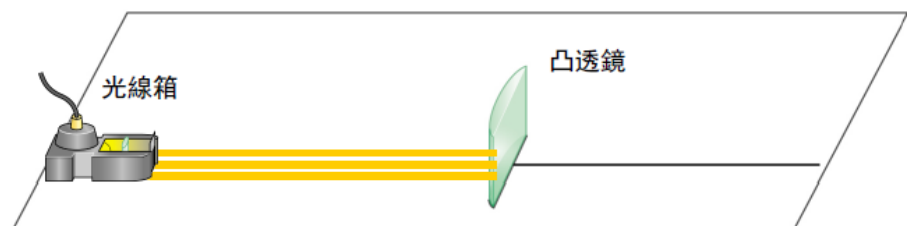
科學科資優課程 (小學)

凸透鏡折射平行光線實驗

姓名：

實驗步驟：

1. 擺放實驗裝置如下圖。
2. 關掉實驗室的燈，並拉上窗簾。
3. 記錄實驗結果。
4. 換上凸透鏡並重複實驗。



Enquiries

For enquiries, please contact us at 3940 0101 after language selection, press "1".