A-LEVEL ECOLOGY FIELD STUDY COURSE

ROLES AND DUTIES OF BIOLOGY TEACHERS

A. MEASURES BEFORE THE COURSE

1. Payment
   No tuition fees will be charged for the field study courses offered by Ho Koon Nature Education Cum Astronomical Centre (HKNEAC), but accommodation and meals are charged at the rate fixed by the Tso Kung Tam Outdoor Recreation Centre (TKTORC) (Tel: 24171107)

2. Parent's permission and insurance coverage
   a. Heads of schools are advised to obtain written permission from parents / guardians of the students concerned beforehand.
   b. It is also advisable to provide your students with necessary insurance coverage for the period of their course in our centre.
      Please see ED (GR) 3027 / 81 administration Circular NO: 37/99 Insurance in schools (dated 1 Sept. 1999) for information / necessary action.

3. Change of participants’ number
   Teachers are required to inform HKNEAC staff any change in the number of participants in the first instance so that necessary program re-arrangements can be made as soon as possible. Tel: 24137122  Fax: 24936612

4. Briefing for students
   Teachers are requested to:
   a. Go through the handouts with students.
   b. Make sure that students have enough ecological knowledge and theoretical background to follow the field course.
   c. Familiarize students with standard equipment such as environmental comparator, quadrat frame, transect line, compass, pH meter etc., and basic field work skills such as sampling and mapping.
   d. Outline the nature of field camp to students, which is very different from work in classroom and students have to cooperate with students from other schools.
   e. Give students psychological preparation for the hard work and tight schedule of the field study course.
   f. Remind students that they are required to present the results of their investigation during the course, and a full report is to be submitted in one month’s time after the course.
   g. Divide students into groups, each group contains not more than 7 students. A coordinator should be elected among the students, who will be responsible for collecting coach fee, check in and check out equipment and other transactions between students and HKNEAC.
   h. Teachers should remind students to bring with them the following items for the purpose of the field study course:
      1. HK ID card.
      2. Old rubber shoes with adequate treads (if possible bring two pairs).
      3. Shorts and long trousers.
      4. Hat, sunglass and long sleeved shirts.
      5. Raincoat and/or anorak.
      6. Clip board, rough paper, graph paper, pencils, pens and other common stationery
      7. Scientific calculator.
      8. Torch.
      9. Camera (1 per group) (better with macro function)
     10. Water bottle for drinking in field sites.
     11. Mosquito and midge repellents (cream or spray)
B. MEASURES DURING THE COURSE

1. **In HKNEAC and TKTORC**
   a. At least one teacher from each participating school is expected to stay with the students in the camp at night to ensure their safety.
   b. Students have to observe the rules of HKNEAC and TKTORC

2. **In field**
   a. Inform HKNEAC ecology teacher whenever accidents occur (e.g. injury, sick) at the first instance.
   b. Remind students:
      i. Safety and ethics in field (refer to *SAFETY IN SCIENCE LABORATORY*, EDHK 1994).
      ii. Importance of punctuality.
      iii. Care of field work equipment.
      iv. Not to disturb villagers during field visits.

3. **Transportation**
   Coach will be arranged by HKNEAC, but coach service fee is to be shared by participating students.

4. **Teacher’s involvement**
   Briefing the habitats, demonstrating ecological skills, introducing equipment, announcement and any other duties concerning all students will be done by HKNEAC staff. However, it is not possible for the HKNEAC staff to look after all students at all time, teachers should take care of their own students in field and in laboratory, should provide academic assistance and guidance on students work, and encourage them to participate and think actively in the course.

5. **Special arrangements in connection with poor weather**
   a. In the event of tropical cyclones likely to affect Hong Kong, the following arrangements will apply:
      i. Hoisting of signal no.1: The course will proceed with some modifications (e.g. outdoor work will be postponed and laboratory work continues)
      ii. Hoisting of / lowering to signal no. 3: On day 1 before the course commences, the morning session will be suspended. If signal no.3 is still hoisted at 12:00 noon, the afternoon session on that day will be suspended. The programme on that day will be postponed to the following day. If signal no.3 is lowered by 12:00 noon, the course will resume at 2:00pm on the same day.
   b. In case of other adverse weather conditions (e.g. heavy downpour of rain, thunderstorm or severe cold front), arrangement will be discussed by teachers concerned and HKNEAC ecology teacher.
   c. In the event of public announcement by the Director of Education that all schools are to be closed as a result of adverse weather conditions, course affected will be cancelled or postponed.
   e. Teachers are advised to contact TKTORC on matters related to opening / closing of the camp. Courses will only be conducted when the camp is open as normal.
SAFETY AND ETHICS IN OUR NATURE ENVIRONMENT

For your safety and for a better nature environment, you are required to observe the rules listed below:

1. CLOTHING, FOOTWEAR AND OTHER ESSENTIALS

a. In terrestrial habitats, to prevent cuts caused by thorns or spines of plants and bites caused by insects or snakes, you should put on long-sleeved shirts, jeans and hats with wide brim. These can also protect you from sunburn.

b. In freshwater habitats, you should dress in shorts and plimsolls with adequate tread.

c. No slipper is allow in laboratory.

d. Mosquito and midge repellents (cream or spray) are necessary especially in terrestrial habitats.

e. Bring with you suitable amount of water as it is not always available in the field.

f. First aid kit will be provided by our centre.

2. DANGEROUS PLANTS AND ANIMALS

a. Nothing found in the wild environment should be ingested.

b. Some plants can induce allergic reactions and some people can be very sensitive to those plants, common examples includes Rhus hypoleuca, Thevetia peruviana, Nerium indicum and Euphorbia milii. Many caterpillars also cause allergic reactions.

c. Poisonous invertebrate such as centipedes, some spiders and ants may hide in litter and soils, when collecting these, use the gloves.

d. Bees, wasps and snakes may hide among grasses, shrubs or shaded woodland. Keep to clear paths whenever possible, or you should examine the area carefully before entering into it.

e. Roaming dogs and Macaqua (monkey) are commonly found in Tai Mo Shan area. Do not irritate them, do not run and keep calm when you see them. Also do not try to feed them.

3. PREVENTING PHYSICAL INJURIES

a. Wet soil or rock surfaces are always coated with a thin layer of algae which is very slippery. It is sensible to try footing before putting weight down.

b. Never stand on steep slopes or unstable slopes. If you have problems concerning the safety of a site, always consult you teachers.

c. No swimming, tree climbing, rock climbing is allowed. Never go into areas where water depth exceeds 1meter.

d. Examine rocks and logs before sitting on them. Do not lift stones or other objects by free hands, always use a stick to turn over them.
4. PREVENTING INFECTIOUS DISEASES

a. Dead specimens of vertebrate in the field should not be collected or closely examined.

b. When working in polluted water habitats, great care should be exercised because the water may be contaminated with infectious bacteria or parasites. Use rubber gloves. Do not get into water. Thoroughly rinse your bodies and equipment used after field work. Samples or specimens collected should also be handled with great care.

5. COLLECTING PLANTS AND ANIMALS

1. No mammal, bird, reptile and amphibian should be collected from the field as many of them are rare or endangered and prohibited from collection by law.

2. Always identify in the field. Make sure that you are clear about the purposes of bringing living organisms away from their habitats before you begin to do so, and only collect minimum number required. Whenever possible, use photogragh to replace true specimen.

3. Legally, no one should collect plant specimen without permission. Therefore when you need to collect plant specimens, ask your teacher as he/she may have Plant Collection Permit and he/she can tell you whether or not the one you want to collect is an endangered species.

4. Prevent unnecessary trampling on grassland, shrubland and soil surface.