

Ecology & Biodiversity

School of Biological Sciences

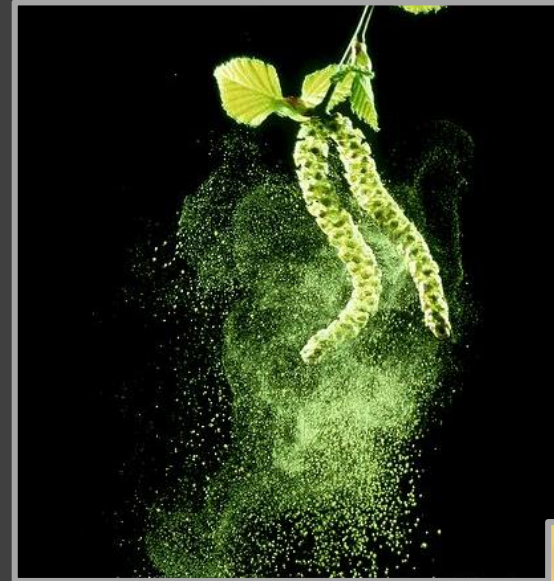


Ecology & Biodiversity (Intensive, Major & Minor)

4-year curriculum



- Diversity of Life
- Interactions between species & their environment
- Regional & global threats on biodiversity





Why choosing this major?

Interest in Science

Curious about biology, nature & conservation

Enthusiastic about exploring the natural world

Love fieldwork and/or laboratory work

Concerned about global environmental issues and protection of nature



What will you learn?

Broad knowledge in ecology, evolution and conservation

Skills to work independently & in team

Develop analytical and critical skills

Communication skills

Understanding of local & global environmental issues

2nd Year 1st Year

BIOL1110 From molecules to cells	BIOL1309 Evolutionary diversity	SCNC1111 Scientific method and reasoning	SCNC1112 Fundamentals of modern science	CCC
BIOL2102 Biostatistics	BIOL2103 Biological sciences laboratory course	BIOL2306 Ecology and evolution	ENVS2002 Environmental data analysis	CCC

20 core and elective courses

Small classes (12-30 students)

65% of courses with field components

4th Year

BIOL4991 Ecology & biodiversity project (12 credits)	BIOL3991 Directed studies in ecology & biodiversity	BIOL4861 Ecology & biodiversity internship	BIOL4304 Ecosystem functioning & services (21)	1 st Sem. 2 nd Sem.	Capstone Disciplinary Core Disciplinary Elective Every other year (year taught) Field course included
	BIOL4302 Environmental impact assessment				

Intensive Major in Ecology & Biodiversity

Accredited degree by the



Intensive Major in Ecology & Biodiversity



- **Diploma with increased international visibility & recognition**
- **Membership**
 - **Access to an international network of professionals**
 - **Discount on selected life science titles and professional development courses**
- **Insurance of excellency in teaching and learning**

1. Introductory level courses (60 credits)

Science Foundation Courses (12 credits)

SCNC1111 Scientific method and reasoning

SCNC1112 Fundamentals of modern science

Disciplinary Courses (48 credits)

BIOL1110 From molecules to cells

BIOL2102 Biostatistics

BIOL2306 Ecology and evolution

EASC1401 Blue Planet

BIOL1309 Evolutionary diversity

BIOL2103 Biological sciences laboratory course

ENVS2002 Environmental data analysis

One chemistry course: CHEM1041 or 1042

2. Advanced level courses (72 credits)

BIOL3302 Systematics and phylogenetics

BIOL3301 Marine biology

BIOL3319 Tropical terrestrial ecology

BIOL3101 Animal behaviour

BIOL3303 Conservation ecology

Plus at least 42 credits (7 courses) selected from the following:

BIOL3305 Tropical & temperate marine ecology

BIOL3314 Plant structure and evolution

BIOL3318 Experimental intertidal ecology

BIOL3408 Genetics

BIOL3419 Insect ecology

BIOL3506 Evolutionary biology

BIOL4505 Oyster aquaculture

BIOL3322 Marine invertebrate zoology

BIOL4302 Environmental impact assessment

BIOL4304 Ecosystem functioning & services

ENVS3019 Urban ecology

ENVS3020 Global change ecology

BIOL3328 Nearshore marine & estuarine ecol.

3. Capstone requirement (12 credits)

Core capstone course

BIOL4991 Ecology & biodiversity project (12)

Elective capstone course (optional)

BIOL3991 Directed studies in ecology & biodiversity (6)

Total Intensive Major: 144 credits

For the most updated curriculum structure, please visit

<https://webapp.science.hku.hk/sr4/servlet/enquiry?frmid=MenuP>



Minor in Marine Biology

(36 credits)

1. Introductory level courses (12 credits)

2. Disciplinary Courses (12 credits)

BIOL1309 Evolutionary diversity (6)

BIOL2306 Ecology and evolution (6)

ENVS1301 Environmental life science (6)

3. Advanced level courses (24 credits)

BIOL3301 Marine biology (6)

ENVS3313 Environmental oceanography (6)

Disciplinary electives 12 credits (2 courses) from the following:

BIOL3303 Conservation ecology

BIOL3322 Marine invertebrate zoology

BIOL3305 Tropical & temperate marine ecology

BIOL3328 Nearshore marine & estuarine ecol.

BIOL3318 Experimental intertidal ecology

A diverse and international team



Prof. Richard Saunders
Plant ecology & evolution



Prof. Gray Williams
Intertidal Ecology



Dr. David Baker
Coral reef ecology



Dr. Tim Bonebrake
Global change ecology



Dr. Stefano Cannicci
Mangrove ecology



Dr. Benoit Guénard
Insect ecology



Dr. Bayden Russell
Marine ecology



Dr. Rajan Vengatesen
Ocean acidification

A diverse and international team



Dr. Mo
Deep se



17 World-class researchers



by
ogy

> 1000 publications in ecology & conservation



Dr. Celia Schunter
Population genetics



Dr. Simon Sin
Animal Behaviour



Dr. Jin Wu
Plant remote sensing



Dr. Billy Hau
Ecological restoration



Dr. Caroline Dingle
Forensic Ecology

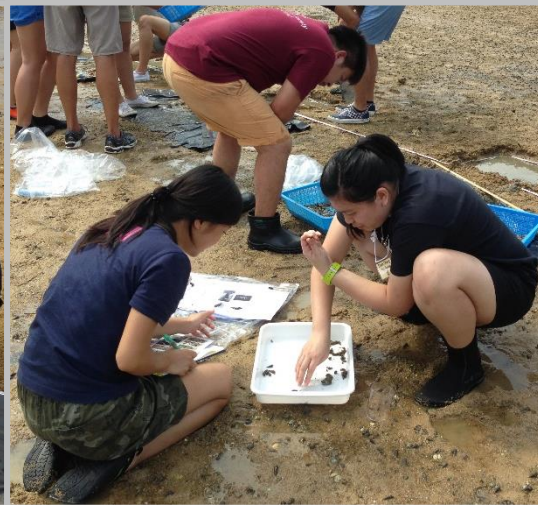
Ecology & Evolution

- Introduction to the interaction between organisms and their environment and the central role of evolution
- Understand and explain the significance of nature using scientific methods



Ecology & Evolution

- 5 days field course!
- Study both marine and terrestrial ecosystems & organisms of Hong Kong
- Familiarize with scientific methods to study organisms and their environments



Hands on learning

16 courses with field courses offered

Marine ecology

Terrestrial ecology

Coastal ecology

Freshwater ecology





Overseas field courses

- Australia
- British Columbia (Canada)
- Hainan (China)
- Malaysia
- Philippines
- Sri Lanka
- South Africa



Make an impact!

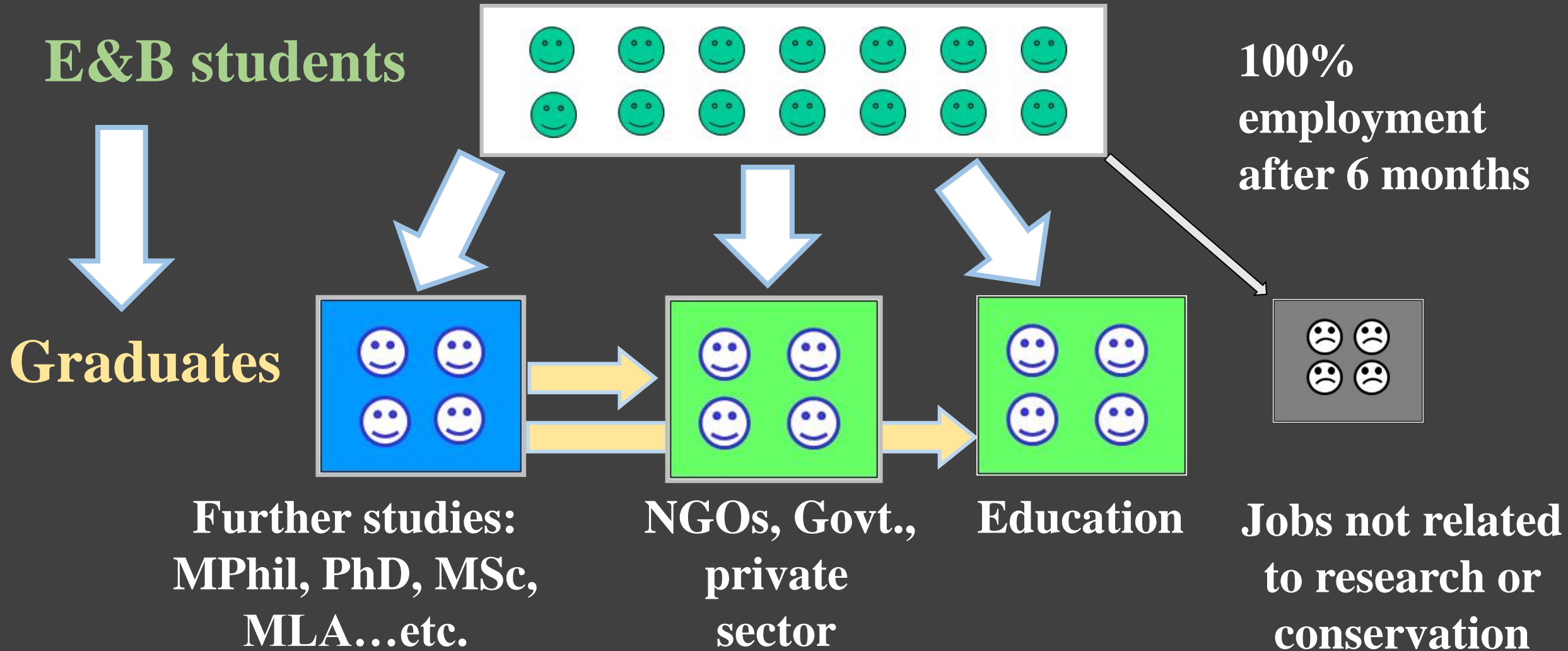
Many opportunities to engage into research as an undergraduate among one of 17 laboratories!



Swire
Institute of
Marine
Science



Building your future career



Thank you!

