





# 'Experiential' residential field courses

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## Why residential field trips?

- Ecology is the science of the interaction between organisms and their environment
- To truly understand ecology you need to immerse your self in the environment: the living laboratory/classroom approach





.... You also get to go to really cool places and see really cool things

# BIOL2318 Biological Sciences Field Course: Marine Life Science 2013 & 14 HKU – UBC Vancouver (Dr V Thiyagarajan & GA Williams)



#### **ENVS3022** Environmental science field course:

Field trips in Japan (Dr M Yasuhara)



Exchange on

**Environmental Issues** with Shimane University

> by Dr Moriaki Yasuhara. School of Biological Sciences

ENVS3016 Environmental Science in Practice is newly launched flagship course of Environmental Science Major. In the reading week of early March, 2012, I led a group of final year ENVS students to a residential field trip in Shimane and Hiroshima, Japan. The field trip, which is a main component for practical and field-based learning of environmental science, was really a great success.

On the second day of the trip, the academic staff of Shimane University and Fukushima University (Professor Ritsuo Nomura, Director of the Research Center for Coastal Lagoon Environments, Shimane University, Professor Toshiaki Irizuki, Dr Koji Seto and Dr Kotaro Hirose) gave us a series of lectures on regional environments and their historical changes of brackish lake Nakaumi.

On the following day, we conducted sediment coring by using two boats to reconstruct anthropogenic impact on the lake for the last few hundred years. Dr Seto primarily conducted the coring, grabbed sampling, and did water quality measurement, and our students were there to observe and record the data. After that, we brought the sediment core back to the laboratory of the institution. We were joined by a reporter at the coring, who subsequently wrote a feature at a local newspaper, highlighting the importance of environmental science education and the first cultural and educational exchange among HKU and Shimane



University.



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Getting into the World of Science -Science Enrichment Programmes for Secondary School Students

Environmental Science in Practice: a Learning Experience that

Aprill 2, 2013

News



by Miss Ruby Chiu, MPhil Student of School of Biological Sciences

Just as old Chinese adage states, "it is better to travel ten thousand miles than read ten thousand books". To widen the horizons of Environmental Science students, Dr Moriaki Yasuhara of School of Biological Sciences organized a 6-day field trip with University of the Ryukyus in Okinawa for the undergraduate course ENVS3016 Environmental Science in Practice during the reading week on March 2013. This had not only equipped the students with essential technical skills for environmental science, but also provided them with the opportunity to have exchange with Japanese teachers and students.

#### Life as an Okinawa university student

"The best thing of this course is that I can experience the life of Japanese university student. We worked with Japanese students during the trip and solved the problems together. Now we have a strong feeling of brotherhood with them." said Yuen Wai-kuen Will, final year student of HKU Environmental Science Major.

The students were given several lectures by Japanese professors including Dr Kazuhiko Fujita (University of the Ryukyus), Dr Chuki Hongo (University of the Ryukus) and Dr Koji Seto (University of Shimane, the place that we conducted the field trip last year), enhancing their understanding of the environmental problems in Okinawa and the field works. They also worked with Japanese students from both Okinawa and

World Ocean Systems Undermined by Climate Change by 2100

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Scientists warn against the high risk of degradation of marine ecosystems and associated human hardships

PhD Candidate Receives the Annual Award of the Malacological Society of London

HKU Actuarial Science Ranked No. 1 in Asia and No.10 Worldwide in Renowned Journal

Professor N P Shah Received the American Dairy Science Association Distinguished Service













**Advanced Experiential Learning Course (6 credit)** 

### BIOL4505 OYSTER AQUACULTURE: BUSINESS **AND TECHNOLOGY**

May 24 to June 12, 2023 Dr V Thiyagarajan

#### Hong Kong (May 24-26, 10-12)

- How aquaculture business running in Hong Kong
- Lecture cum discussion
- Interaction with AFCD Officers and Growers
- Workshop-based teaching

#### **Zhanjiang (May 26-June 1)** and Qingdao (June 2-8)

- Hands-on training for hatchery setup
- How to start an oyster aquaculture business lessons from various cities of China



Deep Bay Oyster

Why do we need costal aquaculture in a business city, the Hong Kong (HK)?

How much is HK's oyster aquaculture production worth?

How we do oyster aquaculture business in HK? Can we make it economically sustainable?

How to start an oyster hatchery? why is it important?

How young science entrepreneurs can start their own ecological business in Hong Kong?

What kind of jobs does oyster aquaculture support?

Public Forum on June 11 in Hong Kong

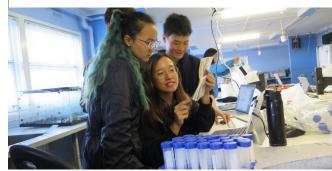
Experts from HKU (HK), Agriculture, Fisheries and Conservation Department (AFCD-HK), Oyster Growers (HK), and Institute of Oceanology (China) and Lee Kum Kee Ltd., will be collaboratively teaching this course

# BIOL3305: Tropical and Temperate Marine Ecology Field Course 2017-19 (Drs BD Russell & S Cannicci)





Quantification of patterns and processes



Laboratory experiments



Field experiments

ENVS 3028: Coastal Sustainability (2019) The University of Hong Kong, University Sains Malaysia, and Northeastern University (USA) (Dr V Thiyagarajan & GA Williams)



# BIOL 3328: Estuarine and Nearshore Ecology (2011 to date): Joint course between HKU, University of Johannesburg, Northwestern University (SAfrica) and Arkansas University (USA) (Gray A Williams)











- 10 HKU undergrads and 4 Postgrads every year travel to Tsitsikamma in SAfrica
- Students from all universities mixed into 4 groups
- They live together in tents; cook and share chores together





## Added values/benefits

- Different educational approaches and tasks
- Moved outside your comfort zone
- The excitement of a new environment
- Cultural exchange (different evenings)
- Learn new skills (camping; cooking over a braii)
- See really cool organisms in a really cool environment – that's ecology!

# Acknowledgements



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