

Oceans: a valuable resource, a vulnerable habitat

Start date	28 Oct 2017	End date	28 Oct 2017
Venue	Madingley Hall Madingley Cambridge		
Tutor	Prof Andrew Price	Course code	1718NDX047

Director of Programmes Emma Jennings
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To book See: www.ice.cam.ac.uk or telephone 01223 746262

Tutor biography

Professor Andrew Price is a marine biologist, environmental consultant and writer. He has specialist knowledge of the Gulf, Middle East and wider Indian Ocean. His recent research has focused on biodiversity, robustness/resilience, environmental disturbance and compensation. For his evaluation of coastal damage from the 1991 Gulf War, Andrew received the *British Consultant of Year Award* ~ a prize open to entries from industry and academia. He is currently an emeritus professor at Warwick University and honorary professor at York University. In 2003, Professor Price was elected Fellow of the Linnean Society. He has written or co-authored over 100 scientific publications, including 3 books on the Gulf/Middle East, several book chapters and many journal articles. His most recent book is *Slow-Tech: Manifesto For An Overwound World* (Atlantic Books, 2009). This shows how robustness helps ensure smooth-running in nature, in what we do and in the things we create. Professor Price teaches on BSc and MSc courses at the Universities of Warwick, York and London.

Course programme

09:30	Terrace bar open for pre-course tea/coffee
10:00 – 11:15	Oceans resources and the effects of fishing
11:15	Coffee
11:45 – 13:00	Science, discovery and adventure during the Sindbad Voyage
13:00	Lunch
14:00 – 15:15	Environmental damage and compensation after the 1991 Gulf War oil spill
15:15	Tea
15:30 – 16:45	Safeguarding ocean health
16:45	Day-school ends

Course syllabus

This day-course will provide an introduction to oceans, fisheries and other marine resources. Using Tutor-provided case studies, students will get insights into marine research and a first-hand account of science on the *Sindbad Voyage* en route to China. They will learn about an extreme environment, and what happened after the world's largest oil spill. Students will explore ways of regulating marine exploitation through marine reserves and other measures. No prior knowledge of marine science will be assumed, but a basic familiarity with biological terms and ecological concepts may be helpful in getting the most from the material covered.

Aims:

This one-day course will:

- Explain why the oceans are a valuable resource and why they need careful management.
- Use case studies to demonstrate the impact of large-scale ocean damage and examples of marine research.
- Demonstrate how ocean management can be performed and why this is important.

Content:

The course will begin with a general introduction to oceans and highlight how they sustain societies, but also face increasing disturbances. Session 1 will focus on ocean features, fisheries and other marine resources. We will also examine less visible ocean goods and services, and how heavy fishing and other human activities threaten their continued accessibility.

The second session will consider a case study in the Indian Ocean that combines science, discovery and adventure, demonstrating how there is still a place for ocean research from low-tech platforms.

After lunch, the focus will move from relatively pristine waters to one of the most polluted seas of the world – the Persian/Arabian Gulf. We will explore how research quantified the damage from a massive oil spill and helped determine levels of compensation.

The final session will address the role of maritime law and traditional approaches in regulating human use of the oceans. We will highlight the importance of specially protected areas in conjunction with broader measures.

Presentation of the course:

The course will consist of a mixture of Tutor led PowerPoint-illustrated lectures and whole group discussions, with the possibility of small group discussion and debate.

As a result of the course, within the constraints of the time available, students should be able to:

- Explain the major features of the oceans as well as their direct and indirect values.
- Understand how ocean research can determine the nature and state of the marine environment.
- Appreciate and summarise why ocean management is necessary and the advantages and disadvantages of some approaches available.

Reading and resources list

Listed below are a number of texts that might be of interest for future reference, but do not need to be bought (or consulted) for the course.

Author	Title	Publisher and date
Sue Kidd, Andy Plater, Chris Frid	The Ecosystem Approach to Marine Planning and Management.	Taylor & Francis Ltd/Earthscan 2011 (online 2012)
Callum Roberts	The Ocean of Life.	Penguin, Random House 2013
Alex Rogers (editor)	The Global State of the Ocean	Elsevier: Marine Pollution Special Issue, Vol. 74, Issue 2 2013
Tim Severin	In The Wake of Sindbad (<i>scientific papers from The Sindbad Voyage available on request</i>)	National Geographic July 1982
Cymie Payne and Peter Sand (eds)	Gulf War Reparations and the UN Compensation Commission: Environmental Liability.	Oxford University Press, USA 2011

Website addresses

Symphony Of The Seas: The Marine Environment. (Our Planet Magazine of the United Nations Environment Programme - December 2007)
<http://www.ourplanet.com/pdfs/OP-2007-12-en-FULLVERSION.pdf>

Additional information

Venue

Details of how to find Madingley Hall can be found on our website:
<http://www.ice.cam.ac.uk/who-we-are/how-to-find-the-institute>

Refreshments

Tea and coffee and lunch will be provided. If you have any specific dietary requirements or allergies and have not already advised us, please inform our Admissions Team on ice.admissions@ice.cam.ac.uk or +44 (0)1223 746262.

Note Students of the Institute of Continuing Education are entitled to 20% discount on books published by Cambridge University Press (CUP) which are purchased at the Press bookshop, 1 Trinity Street, Cambridge (Mon-Sat 9am – 5:30pm, Sun 11am – 5pm). A letter or email confirming acceptance on to a current Institute course should be taken as evidence of enrolment.

Information correct as of: 08 September 2017