

## **2020/1 - ENV-4006B SUSTAINABILITY, SOCIETY AND BIODIVERSITY**

Spring Semester, Level 4 module

(Maximum 180 Students)

UCU: 20

Organiser: Professor Carlos Peres

(UG) MODULE - 40% PASS ON AGGREGATE

Module Type: Examination with Coursework or Project

Timetable Slot: D1/, D3/, F2-A2\, E1-H3\

Exam Paper(hrs):1

Striking a balance between societal development, economic growth and environmental conservation has proven challenging and contentious at many scales and over time. The concept of 'sustainable development' was coined to denote processes aiming to achieve this balance. This module introduces sustainable development, and examines the challenges and opportunities to achieving this, drawing together social and ecological dimensions. Drawing upon the social sciences, this module examines the theory and practice of sustainable development. From an ecological perspective, the module covers a range of concepts relevant to the structure and functioning of the biosphere, and topics ranging from landscape and population ecology to biodiversity conservation. This module is assessed by coursework and an examination.

## **2020/1 - ENV-4007B ATMOSPHERE & OCEANS I**

Spring Semester, Level 4 module

(Maximum 100 Students)

UCU: 20

Organiser: Dr Parvadhya Suntharalingam

(UG) MODULE - 40% PASS ON AGGREGATE

Module Type: Examination with Coursework or Project

Timetable Slot: D2-I2\, E2, C3, A1-F1\

Exam Paper(hrs):2

**IN TAKING THIS MODULE YOU CANNOT TAKE ENV-4008B**

The habitability of planet Earth depends on physical and chemical systems that control everything from the weather and climate to the growth of all living organisms. This module introduces you to some of these key cycles and the ways in which physical and chemical scientists investigate and interpret them. It leads naturally to second and third year study of these systems in more detail, but even if you choose to study other aspects of environmental sciences, a basic knowledge of these systems is central to understanding our planet and how it responds to human pressures. The module is made up of two distinct components. One focuses on the physical study of the environment (physical processes: weather, climate, ocean circulation etc.) whilst the other focuses on the chemical study (chemical processes: weathering, atmospheric pollution, ocean productivity etc.). Interrelationships between these components are explored throughout. Teaching of this module is through a mix of lectures, laboratory practical classes, workshops and a half-day field trip. This module provides a Basic Chemistry introduction for those students who have little or no background in chemistry prior to joining UEA.

## **2020/1 - ENV-4008B ATMOSPHERE & OCEANS II**

Spring Semester, Level 4 module

(Maximum 55 Students)

UCU: 20

Organiser: Dr Parvatha Suntharalingam

(UG) MODULE - 40% PASS ON AGGREGATE

Module Type: Examination with Coursework or Project

Timetable Slot:D2-I2\, E2, C3, A1-F1\

Exam Paper(hrs):2

IN TAKING THIS MODULE YOU CANNOT TAKE ENV-4007B

The habitability of planet Earth depends on physical and chemical systems that control everything from the weather and climate to the growth of all living organisms. This module introduces you to some of these key cycles and the ways in which physical and chemical scientists investigate and interpret them. It leads naturally to second and third year study of these systems in more detail, but even if you choose to study other aspects of environmental sciences, a basic knowledge of these systems is central to understanding our planet and how it responds to human pressures. The module is made up of two distinct components. One focuses on the physical study of the environment (physical processes: weather, climate, ocean circulation etc.) while the other focuses on the chemical study (chemical processes: weathering, atmospheric pollution, ocean productivity etc.). Interrelationships between these components are explored throughout. Teaching of this module is through a mix of lectures, laboratory practical classes, workshops and a half-day field trip.

## **2020/1 - ENV-5002B ENVIRONMENTAL POLITICS AND POLICY MAKING**

Spring Semester, Level 5 module

(Maximum 90 Students)

UCU: 20

Organiser: Professor Andy Jordan

(UG) MODULE - 40% PASS ON AGGREGATE

Module Type: Coursework

Timetable Slot:D3\, A2/, G1/-H2\

The most significant obstacles to problem solving are often political, not scientific or technological. This module examines the emergence and processes of environmental politics. It analyses these from different theoretical perspectives, particularly theories of power and public policy making. The module is focused on contemporary examples of politics and policy making at UK, EU and international levels. The module supports student-led learning by enabling students to select (and develop their own theoretical interpretations of) 'real world' examples of politics. Assessment is via seminar slides and a case study essay. The module assumes no prior knowledge of politics.

## **2020/1 - ENV-5004B APPLIED GEOPHYSICS**

Spring Semester, Level 5 module

(Maximum 15 Students)



Spring Semester, Level 5 module  
(Maximum 40 Students)

UCU: 20 Organiser: Dr Xiaoming Zhai

(UG) MODULE - 40% PASS ON AGGREGATE

Module Type: Examination

Timetable Slot:AGJ

Exam Paper(hrs):2 Exam Period:SPR-02

This module gives you an understanding of the physical processes occurring in the basin-scale ocean environment. We will introduce and discuss large scale global ocean circulation including gyres, boundary currents and the overturning circulation. Major themes include the interaction between ocean and atmosphere, and the forces which drive ocean circulation.

### **2020/1 - ENV-5028B GIS SKILLS FOR PROJECT WORK**

Spring Semester, Level 5 module  
(Maximum 100 Students)

UCU: 20 Organiser: Dr Katy Appleton

(UG) MODULE - 40% PASS ON AGGREGATE

Module Type: Coursework

Timetable Slot:E1-H3\, F1/, A3

This module builds upon the introduction to GIS provided in the first year Research and Field Skills module, focusing on how you obtain your data, integrate it and then undertake analysis and presentation tasks. ESRI ArcGIS will be the main software used, but the module also offers information on online GIS (ArcGIS Online) as well as scripting tools (Python) and open source software (QGIS) that you may wish to progress in your own time. Teaching will consist of a one-hour lecture and a three-hour practical class each week.

### **2020/1 - ENV-5031B SOCIAL RESEARCH SKILLS**

Spring Semester, Level 5 module  
(Maximum 55 Students)

UCU: 20 Organiser: Dr Noel Longhurst

(UG) MODULE - 40% PASS ON AGGREGATE

Module Type: Coursework

Timetable Slot:F2, B1\, D1

IN TAKING THIS MODULE YOU CANNOT TAKE ENV-5036K

Human geography and the environmental social sciences employ a range of approaches and methods with which to explore their diverse research questions. This module will introduce you to the practice of social science research, including methods that use quantitative and qualitative data. Through a combination of lectures, workshops and practical activities, you will learn how to design and carry out your own research. By the end of the module you will

know how to formulate an interesting research question; how to choose an appropriate method to investigate it; how to ensure that you collect good quality data; how to analyse and interpret your data and how to present the results of your research. The module is recommended if you intend to use social research methods in your independent dissertation project. In addition to gaining practical research skills, you will develop your ability to critically evaluate research studies that use social science methods. As well as benefiting your academic studies, these analytical and practical research skills are highly valued in many occupational sectors.

## **2020/1 - ENV-5035B SEDIMENTOLOGY**

Spring Semester, Level 5 module

(Maximum 35 Students)

UCU: 20

Organiser: Professor Julian Andrews

(UG) MODULE - 40% PASS ON AGGREGATE

Module Type: Coursework

Timetable Slot: B2, D2, F1\, E2+-C3

Sediments and sedimentary rocks cover much of the Earth's surface, but how do they get there and what can they tell us? If you are a geologist or environmental scientist with particular interest in physical geography then this is a key issue that you need to think about. Sediments record the Earth's history of environmental change, a record that started 3.8 billion years ago. Sediments contain the fossil record and host many of the world's natural resources including water, hydrocarbons and minerals. In this module you will discover how sedimentologists decode the wealth of information sediments contain, taught by two practicing sedimentologists who have international research reputations in their respective fields. This module includes the study of modern sediments in a range of environments including rivers, the continental shelf and deep ocean basins. We put particular emphasis on the physical and chemical processes that result in the deposition of different sediment types. We then use this basis to interpret the origin and processes that formed ancient sedimentary rocks. The module emphasises development of practical skills in the laboratory, and also in the field.

## **2020/1 - ENV-5036K SOCIAL RESEARCH SKILLS WITH FIELD COURSE**

Spring Semester, Level 5 module

(Maximum 25 Students)

UCU: 20

Organiser: Dr Noel Longhurst

(UG) MODULE - 40% PASS ON AGGREGATE

Module Type: Coursework

Timetable Slot: F2, B1\, D1

**IN TAKING THIS MODULE YOU CANNOT TAKE ENV-5031B**

Human geography and the environmental social sciences employ a range of approaches and methods with which to explore their diverse research questions. This module will introduce you to the practice of social science research, including methods that use quantitative and qualitative data. Through a combination of lectures, workshops, and practical activities, you





