

## General Information

**Module Code**

BIO-5014B

**Academic Year**

2021/2

**Module Title**

COMMUNITY, ECOSYSTEM AND MACRO-ECOLOGY

**Module type**

WW

**Semester / Term**

SEM2

**Level**

5

**Credit Value**

20

**Scheme**

UG

**Related Modules:**

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**Pre-requisite****Co-requisite****Forbidden**

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**Timetable slot**

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**Is this module suitable for inbound study abroad students?**

Y

**Additional costs**

**Maximum number of students**

999

**Module Organiser**

Dr Richard Davies

**Module Description****What is this module about?**

This module introduces you to major concepts and definitions in community ecology, macro-ecology and biogeography. You will use these to explore how communities are structured in relation to local-scale to regional-scale processes, how they function and respond to perturbations at different scales, and result in emergent macro- to global-scale patterns of biodiversity distribution. Throughout the module, there is an emphasis on the relevance of theory and fundamental science to understanding the current environmental and biodiversity crisis. Anthropogenic impacts on natural communities through land-use, species exploitation, non-native species, and climate change, are a recurrent theme underpinning the examples you will draw upon.

**Learning objectives and Outcomes****What are the Learning objectives?**

To: learn fundamental concepts in community ecology; understand the drivers of community structure and diversity; understand key theories in the biogeography of species distribution; understand study design and sampling in community ecology; understand the application of analytical approaches in community ecology

**What are the Learning Outcomes?**

Name	Details
1	fundamental concepts learn fundamental concepts in community ecology, macro-ecology and biogeography
2	drivers of community structure and diversity the hierarchy of influences on community structure and diversity from local- to macro-scales
3	key theories in biogeography the importance of island biogeography, continental drift, and dispersal ecology for communities
4	study design and sampling in community ecology scale, study design, and sampling in community ecology

**5**

analytical approaches in community ecology  
 methods of analysing community structure, assembly, and diversity

## Learning activities and Effort hours

Learning activity	Total effort hours	Indicative effort hours per week
<b>1. Class sessions (Lectures, workshops, lab sessions, seminars etc.)</b>	41	3.2
<b>2. Pre-class preparation and follow up study</b>	96	8
<b>3. Work-based or Placement Hours</b>	0	0
<b>4. Formative assessments/ activities</b>	3	0.25
<b>5. Feedback/ Feed forward sessions</b>	0	0
<b>6. Summative assessments (essays, dissertations, oral presentations, worksheets, lab reports etc.)</b>	12	1
<b>7. Background reading</b>	60	5
<b>8. Exams/ OSCEs</b>		
<b>9. Course Tests</b>		
<b>10. Tutorials (Individual or small groups)</b>		
<b>Total Hours =</b>	<b>212.00</b>	<b>17.45</b>

## Learning Support Materials

**Should this module be exempt from requiring an online reading list?**

Y

Link to Talis (<https://uea.rl.talis.com/index.html>)

## Formative Assessments

Sequence	Assessment Type	Title	Deadline
FM1	Formative Assessment	Essay Plan (300 words)	

## Summative Assessments

Sequence	Assessment Type	Title	Deadline	Weighting	Method of submission	Method of return	Return date	Format and purpose of feedback
001	Written Assignment	Essay (2000 words)		20 / 100				
<b>Further Details</b>								
002	Written Assignment	Practical Report (1500 words)		20 / 100				
<b>Further Details</b>								
003	Exam Standard	Examination		60 / 100				
<b>Further Details</b>								

## Attribute Development

On this module students will develop knowledge, insights and attributes that are readily transferable into future or current work settings. The attributes are articulated below to help understand how the module will help students to thrive on their course and prepare them for the world of work. These attributes are also articulated within the UEA Award.

### Academic excellence

- In-depth and extensive knowledge, understanding and skills in chosen discipline(s)
- The ability to collect, collate, analyse and critically engage with a wide range of information sources, and evidence
- The ability to analyse and critically engage with a wide range of concepts and ideas

### **Critical thinking & problem solving**

- A capacity for independent, conceptual and creative thinking
- A capacity for informed argument and logical reasoning
- A capacity for problem identification and problem-solving

### **Learning & personal development**

- A commitment to developing professional values, self-insight and capabilities
- The ability to respond positively to constructive criticism and feedback from peers, tutors and colleagues
- Self-confidence and an ability to exercise own 'voice'

### **Digital literacy and IT**

- Confidently employ a range of digital technologies for academic and professional/ career development purposes
- Use appropriate digital technologies and resources to locate diverse types of information for both academic and non-academic purposes
- The ability to critically evaluate and engage with the information obtained

### **Self-management & professionalism**

- A capacity for taking responsibilities and ownership of actions
- An ability to manage time effectively, including setting priorities, juggling competing demands and meeting deadlines
- An understanding of work cultures and practices, including work place professionalism

### **Team working and leadership**

- An ability to co-operate and collaborate with others, including working to shared aims
- An ability to take other viewpoints, have empathy for other people's position and give constructive feedback
- An ability to motivate and lead others, including taking the initiative and delegating when required

### **Communication**

- An ability to communicate in written form for different purposes, audiences and contexts
- An ability to communicate in person for different purposes, audiences and contexts
- An ability to network effectively with others for specific purposes

### **Applied numeracy and Technical proficiency**

- An ability to perform routine calculations in daily tasks and in applied contexts
- An ability to analyse and interpret data and evidence

- Proficiency in skilled techniques used for academic and professional purposes

### **Career management**

- A capacity to reflect on and articulate qualities, strengths and attributes
- The ability to research specific job and career areas
- An ability to present your experience and attributes positively to graduate employers

### **Commercial awareness**

- A knowledge of the link between academic subjects and their commercial applications
- An understanding of business priorities and the needs of graduate employers
- The ability to understand and prioritise customer needs

### **Innovation and enterprise**

- The confidence to introduce and establish something new
- The potential to take an idea through to its practical application
- The potential to apply an enterprising mind-set to situations

### **Citizenship and stewardship**

- An understanding of your place within local and global communities
- An awareness of the need to manage shared and finite resources, including an appreciation of moral and ethical dimensions
- An ability to improve the lives of others and lobby for positive change through community and/or political engagement