pdf created: 29/03/2024 14:00:21

BL2307 Ecology

(BL2307 online module handbook version 62)

Credits: 15

Semester: 2

Module Organiser
Prof Oscar Gaggiotti
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01334 463513

Pre-requisite Modules:
Before taking this module you must pass BL1101 and pass BL1102

Anti-requisite Modules:

Post-requisite Modules:

Additional Module Information:
Please check MMS regularly for additional module information

This module introduces basic concepts in population and community ecology and how they relate to biodiversity. It provides an understanding of fundamental ecological concepts including population regulation, intra- and inter-specific competition, species niche as well as taxonomic and functional diversity. This module is suitable for all Biologists and environmental scientists. Although it is an introductory module, it will cover the latest developments in the field of ecology.

BL2307View content for BL2307 (2023/4) in the Module Management System (MMS)

View the current Biology Online Module Catalogue for BL2307

BL2307View BL2307 (2023/4) in the University of St Andrews Module Catalogue

Contents:

BL2307: Timetable

Legend (not all modules have every event type):

lecture	tutorial	workshop	practical	other

Semester 2: Week 1

DATE & TIME	VENUE	STAFF	EVENT
Thursday 18-01-2024 11:00 to 12:00	Mathematical Institute MAT: Lecture Theatre B	**Prof Oscar Gaggiotti** -	Lecture L1: **Introduction: What is Ecology?** 2023-4_BL2307_L1
Friday 19-01-2024 11:00 to 12:00	Mathematical Institute MAT: Lecture Theatre B	**Dr Julie Hope** -	Lecture L2: **Physical environment** 2023-4_BL2307_L2

Semester 2: Week 2

DATE & TIME	VENUE	STAFF	EVENT
Wednesday 24-01-2024 11:00 to 12:00	Other UCO: School II	**Dr Julie Hope** -	Lecture L3: **Environmental Ecology 1** 2023-4_BL2307_L3
Thursday 25-01-2024 11:00 to 12:00	Other UCO: School II	**Dr Julie Hope** -	Lecture L4: **Environmental Ecology 2** 2023-4_BL2307_L4
Friday 26-01-2024 11:00 to 12:00	Other UCO: School II	**Dr Julie Hope** -	Lecture L5: **Environmental Ecology 3** 2023-4_BL2307_L5

Semester 2: Week 3

DATE & TIME	VENUE	STAFF	EVENT
Thursday 01-02-2024 11:00 to 12:00	Mathematical Institute MAT: Lecture Theatre B	**Dr Verena Dietrich-Bischoff** -	Lecture L6: **Population Processes: growth and regulation 1** 2023-4_BL2307_L6
Friday 02-02-2024 11:00 to 12:00	Mathematical Institute MAT: Lecture Theatre B	**Dr Verena Dietrich-Bischoff** -	Lecture L7: **Population Processes: growth and regulation 2** 2023-4_BL2307_L7

Semester 2: Week 4

DATE & TIME	VENUE	STAFF	EVENT
Wednesday 07-02-2024 11:00 to 12:00	Other UCO: School II	**Dr Verena Dietrich-Bischoff** -	Lecture L8: **Population Processes: interactions between two populations - competition** 2023-4_BL2307_L8
Thursday 08-02-2024 11:00 to 12:00	Other UCO: School II	**Dr Verena Dietrich-Bischoff** -	Lecture L9: **Population Processes: interactions between two populations - predation** 2023-4_BL2307_L9
Thursday 08-02-2024 14:00 to 17:00	Biomedical Sciences Building MBS: 142 - Biology Teaching Lab	**Dr Verena Dietrich-Bischoff** -	Practical P1: **Population processes** 2023-4_BL2307_P1
Friday 09-02-2024 11:00 to 12:00	Other UCO: School II	**Dr Verena Dietrich-Bischoff** -	Lecture L10: **Population processess: how many animals are there?** 2023-4_BL2307_L10
Friday 09-02-2024 14:00 to 17:00	Biomedical Sciences Building MBS: 142 - Biology Teaching Lab	**Dr Verena Dietrich-Bischoff** -	Practical P2: **Population processes** 2023-4_BL2307_P2

Semester 2: Week 5

DATE & TIME	VENUE	STAFF	EVENT
Thursday 15-02-2024 11:00 to 12:00	Mathematical Institute MAT: Lecture Theatre B	**Dr Miguel Barbosa** -	Lecture L11: **Communities to Ecosystems: special species** 2023-4_BL2307_L11

Friday 16-02-2024 11:00 to 12:00	Mathematical Institute MAT: Lecture Theatre B	**Dr Miguel Barbosa** -	Lecture L12: **Communities to Ecosystems: ecosystem function** 2023-4_BL2307_L12

Semester 2: Week 6

DATE & TIME	VENUE	STAFF	EVENT
Wednesday 21-02-2024 11:00 to 12:00	Other UCO: School II	**Dr Miguel Barbosa** -	Lecture L13: **Communities to Ecosystems: community assembly** 2023-4_BL2307_L13
Thursday 22-02-2024 11:00 to 12:00	Other UCO: School II	**Dr Miguel Barbosa** -	Lecture L14: **Communities to Ecosystems: disturbance** 2023-4_BL2307_L14
Thursday 22-02-2024 14:00 to 17:00	Bute Building BUT: A21 - Computer Classroom	**Prof Oscar Gaggiotti** -	Practical P3: **Measuring species diversity** 2023-4_BL2307_P3
Friday 23-02-2024 11:00 to 12:00	Other UCO: School II	**Dr Miguel Barbosa** -	Lecture L15: **Communities to Ecosystems: ecosystem stability** 2023-4_BL2307_L15
Friday 23-02-2024 14:00 to 17:00	Bute Building BUT: A21 - Computer Classroom	**Prof Oscar Gaggiotti** -	Practical P4: **Measuring species diversity** 2023-4_BL2307_P4

Spring Break: 26-Feb-2024 to 01-Mar-2024

Semester 2: Week 7

DATE & TIME	VENUE	STAFF	EVENT
Thursday 07-03-2024 11:00 to 12:00	Mathematical Institute MAT: Lecture Theatre B	**Dr Miguel Barbosa** -	Lecture L16: **Biodiversity I** 2023-4_BL2307_L16
Friday 08-03-2024 11:00 to 12:00	Mathematical Institute MAT: Lecture Theatre B	**Dr Miguel Barbosa** -	Lecture L17: **Biodiversity II** 2023-4_BL2307_L17

Semester 2: Week 8

DATE & TIME	VENUE	STAFF	EVENT
Wednesday 13-03-2024 11:00 to 12:00	Other UCO: School II	**Prof Graeme Ruxton** -	Lecture L18: **Ecology of Extreme Environments: Ecology of Deserts I** 2023-4_BL2307_L18
Thursday 14-03-2024 11:00 to 12:00	Other UCO: School II	**Prof Graeme Ruxton** -	Lecture L19: **Ecology of Extreme Environments: Ecology of Deserts II** 2023-4_BL2307_L19
Thursday 14-03-2024 14:00 to 17:00	Biomedical Sciences Building MBS: 142 - Biology Teaching Lab	**Dr Miguel Barbosa** -	Practical P5: **tba** 2023-4_BL2307_P5
Friday 15-03-2024 11:00 to 12:00	Other UCO: School II	**Prof Graeme Ruxton** -	Lecture L20: **Ecology of Extreme Environments: Ecology of Polar Regions I** 2023-4_BL2307_L20
Friday 15-03-2024 14:00 to 17:00	Biomedical Sciences Building MBS: 142 - Biology Teaching Lab	**Dr Miguel Barbosa** -	Practical P6: **tba** 2023-4_BL2307_P6

Semester 2: Week 9

DATE & TIME	VENUE	STAFF	EVENT
Thursday 21-03-2024 11:00 to 12:00	Mathematical Institute MAT: Lecture Theatre B	**Prof Graeme Ruxton** -	Lecture L21: **Ecology of Extreme Environments: Ecology of Polar Regions II** 2023-4_BL2307_L21
Friday 22-03-2024 11:00 to 12:00	Mathematical Institute MAT: Lecture Theatre B	**Prof Graeme Ruxton** -	Lecture L22: **Ecology of Extreme Environments: Ecology of Life Underground** 2023-4_BL2307_L22

Semester 2: Week 10

DATE & TIME	VENUE	STAFF	EVENT
Wednesday 27-03-2024 11:00 to 12:00	Other UCO: School II	**Prof Oscar Gaggiotti** -	Lecture L23: **Molecular Ecology: measuring and describing genetic diversity I** 2023-4_BL2307_L23
Thursday 28-03-2024 11:00 to 12:00	Other UCO: School II	**Prof Oscar Gaggiotti** -	Lecture L24: **Molecular Ecology: measuring and describing genetic diversity II** 2023-4_BL2307_L24
Thursday 28-03-2024 14:00 to 17:00	Bute Building BUT: A21 - Computer Classroom	**Prof Oscar Gaggiotti** -	Practical P7: **Molecular Ecology of Marine Mammals** 2023-4_BL2307_P7
Friday 29-03-2024 11:00 to 12:00	Other UCO: School II	**Prof Oscar Gaggiotti** -	Lecture L25: **Molecular Ecology: making inferences about the ecology of a species from molecular data 1** 2023-4_BL2307_L25
Friday 29-03-2024 14:00 to 17:00	Bute Building BUT: A21 - Computer Classroom	**Prof Oscar Gaggiotti** -	Practical P8: **Molecular Ecology of Marine Mammals** 2023-4_BL2307_P8

Semester 2: Week 11

DATE & TIME	VENUE	STAFF	EVENT
Thursday 04-04-2024 11:00 to 12:00	Mathematical Institute MAT: Lecture Theatre B	**Prof Oscar Gaggiotti** -	Lecture L26: **Molecular Ecology: making inferences about the ecology of a species from molecular data 2** 2023-4_BL2307_L26
Friday 05-04-2024 11:00 to 12:00	Other MAT: Lecture Theatre B	**Prof Oscar Gaggiotti** -	Lecture L27: **Application of Molecular ecology to conservation** 2023-4_BL2307_L27

BL2307: Reading List

BL2307Click for BL2307 reading list

BL2307: Assessment

2-hour Written Examination = 50%, Coursework = 50%

BL2307View coursework assessment details for BL2307 (2023/4) in MMS

The following related information applies to all Biology modules:

School of Biology Marking Criteria:	SeeÂ JH booklet info (st-andrews.ac.uk)Â
Late submission of continuous assessment work:	All late submissions of coursework that do not require electronic submission should be made via the Biology Teaching Office, Level 2, BMS Building, North Haugh.
Exam details:	See School of Biology UG Handbook JH booklet info (st-andrews.ac.uk)Â : All Biology exams will be conducted online for 2022-23.
Exam timetable:	See Timetables - Exams - University of St Andrews (st-andrews.ac.uk)Â
Expected attendance:	SeeÂ JH booklet info (st-andrews.ac.uk) Â for detailed attendance requirements.
Good Academic Practice & Avoiding Academic Misconduct:	SeeÂ JH booklet info (st-andrews.ac.uk)
University Student Handbook:	University Student Handbook
School and University regulations in the School and University Undergraduate Handbook relating to absence reporting, penalties and rules for late submission of work, extensions for coursework, return of coursework, S-coding, good academic practice and Academic Alerts.:	JH booklet info (st-andrews.ac.uk) University Student Handbook

Who to ask

(Information in this section applies to all Biology Modules)

Before contacting staff, students should check the content of the Biology Undergraduate Handbook, the module handbook and specific task instructions.

Questions about	**Contact**
General teaching matters	Biology Teaching Office (bioteach@st-andrews.ac.uk)
Rescheduled or cancelled events	Check your University email
Lecture or practical content	The lecturer who presented the material
Completing assessed practical assignments	The lecturer who set the assignment
Completing assessments	Module Organiser (Prof Oscar Gaggiotti oeg@st-andrews.ac.uk)
Marking on continuous assessment	The Demonstrator or Module Organiser (Prof Oscar Gaggiotti oeg@st-andrews.ac.uk)
Marking on exams	Module Organiser (Prof Oscar Gaggiotti oeg@st-andrews.ac.uk)
Rearranging practical days	Module Organiser (Prof Oscar Gaggiotti oeg@st-andrews.ac.uk)
Absence and/or extensions	Module Organiser (Prof Oscar Gaggiotti oeg@st-andrews.ac.uk) **and** the Biology Teaching Office (bioteach@st-andrews.ac.uk)
Difficulties with academic progress which impact more than one module:	Year Coordinator See School of Biology UG Handbook for list: JH booklet info (st-andrews.ac.uk)
Overall performance, progress or future directions:	Advisor of Studies
Disability:	Disability Coordinator (biodisabilities@st-andrews.ac.uk)
For advice and support on any issue e.g. academic, financial, international, personal or health matters, or if you are unsure of who to go to for help:	Advice & Support Centre Address: 79 North Street, St Andrews Email: theasc@st-andrews.ac.uk Web: https://www.standrews.ac.uk/ask-a-question/ Tel: 01334 462020
University assistance with urgent matters out of office hours:	Tel: 01334 476161 Web: https://www.st-andrews.ac.uk/students/advice/counselling/incrisis/

Biology Teaching Office:

We are happy to hear from you about teaching matters. The School of Biology Teaching Office is open Monday to Friday 09.00 - 13.00 and 14.00 - 17.00. School of Biology staff will respond to your emails during these hours. Our team will provide a response to you within three working days.

Biology Teaching Office (Level 2), University of St Andrews, Biomolecular Sciences Building, North Haugh, St Andrews, Fife KY16 9ST

Email: bioteach@st-andrews.ac.uk

Tel: 01334 46 3602 or 3566

BL2307: Contributing Staff

Prof Oscar Gaggiotti **(Module Organiser)**	MASTS Professor	oeg@st-andrews.ac.uk
Dr Miguel Barbosa	Lecturer in Marine Biology	mb334@st-andrews.ac.uk
Dr Verena Dietrich-Bischoff	Lecturer (Education-Focused)	vdb@st-andrews.ac.uk
Prof Oscar Gaggiotti (Module Organiser)	MASTS Professor	oeg@st-andrews.ac.uk
Dr Julie Hope	Lecturer in Marine Biology	jah23@st-andrews.ac.uk
Prof Graeme Ruxton	Professor	gr41@st-andrews.ac.uk

BL2307: Learning Outcomes

Students completing module BL2307 successfully should be able to:

- Explain what Ecology is and what is its importance in modern human societies
- Summarise what the different population processes are
- Be able to describe the flow of energy through food webs, and controls thereon
- Be able to identify and use an economic (cost-benefit) approach to understand the functional significance of behaviour
- Differentiate between the different levels of biodiversity
- Describe what molecular ecology is and how it can be used in conservation biology

BL2307: Acquired Skills

Practical Skills

Transferable Skills

- Critically evaluating sources/information
- Sourcing figures/tables
- Reflective analysis
- Problem-solving questions
- Biodiversity analysis
- Calculations/equations
- Data analysis
- Data analysis (depending on project)
- Distinguish different types of data
- Genetic Drift
- Use other data analysis software

Policies

(Information in this section applies to all Biology Modules)

- The procedures and regulations followed by the School of Biology are outlined in the University Handbook and in the School of Biology UG handbookÂ Â JH booklet info (st-andrews.ac.uk)Â
- All coursework associated with the module must be completed and submitted by its due date.
- Specific School regulations relating to absence reporting, penalties and rules for late submission of work, extensions for coursework, return of coursework, S-coding, Good Academic Practice and Academic Alert are stated in the School of Biology UG hand bookÂ JH booklet info (st-andrews.ac.uk)Â Â and students are required to carefully read these regulations.
- Students are also referred to the University Handbook, available at: http://www.st-andrews.ac.uk/studenthandbook/