pdf created: 31/08/2022 15:44:29

BL4251 Tropical Marine Biology

(BL4251 online module handbook version 97)

Credits: 15

Semester: 1

Module Organiser

Dr Miguel Barbosa mb334@st-andrews.ac.uk 01334 463341

Pre-requisite Modules:

Anti-requisite Modules:

Post-requisite Modules:

Additional Module Information:

Please check MMS regularly for additional module information



image: Tropical Marine Reef System

The goal of this module is to examine the ecological and biological principles underpinning the major tropical marine ecosystems. The module provides an understanding of the ecological processes that control tropical marine ecosystems, and considers the organisms that are characteristic of each. All the major tropical marine habitats will be considered, but with a focus on coral reef, seagrass and mangrove ecosystems. The module also tackles topical research areas on the subject through student-led seminars, which will vary depending on the latest scientific research and the specific interests of participants. On completion of the module, students will have an understanding of coral reef, mangrove and seagrass ecology. They will understand the biology and physiology of corals and be able to identify the major phyla associated with tropical marine ecosystems. The module will also provide an understanding of the threats to tropical marine habitats, current research trends on tropical marine systems, and the scientific approaches and techniques used tackle scientific questions relating to tropical marine biology.

BL4251View content for BL4251 (2022/3) in the Module Management System (MMS)

View the current Biology Online Module Catalogue for BL4251

| BL4251View BL4251 (2022/3) in the University of St Andrews Module Catalogue | | | | | | | |
|--|--|--|--|--|--|--|--|
| DL4231 VIEW DL4231 (2022/3) III LIIE OHIVEISILY OF SE AHUTEWS MODULE CALATOGUE | | | | | | | |
| | | | | | | | |
| | | | | | | | |
| | | | | | | | |
| | | | | | | | |
| | | | | | | | |
| | | | | | | | |
| | | | | | | | |
| | | | | | | | |
| | | | | | | | |
| | | | | | | | |
| | | | | | | | |
| | | | | | | | |
| | | | | | | | |
| | | | | | | | |
| | | | | | | | |
| | | | | | | | |
| | | | | | | | |
| | | | | | | | |
| | | | | | | | |
| | | | | | | | |
| | | | | | | | |
| | | | | | | | |
| | | | | | | | |
| | | | | | | | |
| | | | | | | | |
| | | | | | | | |
| | | | | | | | |
| | | | | | | | |
| | | | | | | | |

Contents:

- Cover
- Contents
- Timetable
- Reading List
- Assessment
- Who To Ask
- Contributing Staff
- Learning Outcomes
- Acquired Skills
- Policies

BL4251: Timetable

09:00 to 10:00

| - | all modules have every tutorial workshop | practical other | |
|--|--|--|--|
| | | practical | |
| Semester | 1: Week 1 | | |
| DATE & TIME | VENUE | STAFF | EVENT |
| Friday 16-09-2022 09:00 to 10:00 | Bute Building Lecture theatre D | <u>Dr Miguel Barbosa</u> - | Lecture L1: Introduction to BL4251 2022-3_BL4251_L1 dual |
| Friday 16-09-2022 10:00 to 11:00 | Bute Building Lecture Theatre D | <u>Dr Miguel Barbosa</u> | Lecture L2: Tropical Marine Biology & it diversity 2022-3 BL4251 L2 |
| | | | dual |
| Semester | 1: Week 2 | | |
| DATE & TIME | VENUE | STAFF | EVENT |
| Friday 23-09-2022 09:00 to 10:00 | Bute Building Lecture Theatre D | <u>Dr Miguel Barbosa</u> - | Lecture L3: Mangrove Ecology ²⁰²²⁻³ _BL4251_L3 dual |
| Friday | Bute Building | <u>Dr Miguel Barbosa</u> | Lecture L4: Seagrass Ecology |
| 23-09-2022 10:00 to 11:00 | Lecture Theatre D | | 2022-3_BL4251_L4 dual |
| Semester | 1: Week 3 | | |
| DATE & TIME | VENUE | STAFF | EVENT |
| Friday 80-09-2022 | Bute Building Lecture Theatre D | Prof Maria Dornelas Dr Miguel Barbosa | Lecture L5: Diversity of tropical marine invertebrates 2022-3 BI4251 L5 |
| 09:00 to 10:00 | | | dual |
| Friday 30-09-2022 | Bute Building Lecture theatre D | <u>Dr Miguel Barbosa</u> | Tutorial T1: Drop-in session []" Abstract Q&A |
| 10:00 to 11:00 | | | dual |
| Semester | 1: Week 4 | | |
| DATE & TIME | VENUE | STAFF | EVENT |
| riday | Bute Building | Mr Garrett Fundakowski | Workshop W1: Coral ID workshop |
| 07-10-2022 09:00 to 10:00 | Lecture theatre D | Mr Garrett Fundakowski | The workshop will be held in the Museum (Bute) and will be organised by Dr Dornela |
| Friday 07-10-2022 | Bute Building Lecture Theatre D | Mr Garrett Fundakowski Mr Garrett Fundakowski | Lecture L6: Coral reef ecology 2022-3 BL4251 L6 |
| 10:00 to 11:00 | 200tare medice b | I'll Gullett I ulludkowski | Dual |
| Semester | 1: Week 5 | | |
| DATE & TIME | VENUE | STAFF | EVENT |
| Friday 14-10-2022 | Bute Building Lecture Theatre D | <u>Dr Miguel Barbosa</u> - | Lecture L7: Behavioural Ecology of Tropical Fish 2022-3 BL4251 L7 |
| 09:00 to 10:00 | | | 2022-3_BL4251_L/ Dual |
| Friday 14-10-2022 | Bute Building Lecture Theatre D | <u>Dr Miguel Barbosa</u> | Lecture L8: Fish Behaviour and conservation 2022-3 814251 L8 |
| 10:00 to 11:00 | | | Dual |
| Semester | 1: Week 7 | | |
| DATE & TIME | VENUE | STAFF | EVENT |
| Friday 28-10-2022 09:00 to 10:00 | Bute Building Lecture Theatre D | <u>Dr Miguel Barbosa</u> - | Tutorial T2: Threats & Hope in tropical marine ecosystems |

dual

| Friday 28-10-2022 | Bute Building Lecture Theatre D | <u>Dr Miguel Barbosa</u> - | Workshop W2: Drop-in session []" grant proposal Q&A 2022-3 BL4251_W2 |
|--|---|-------------------------------|--|
| 10:00 to 11:00 | | | In person |
| Semester | 1: Week 8 | | |
| DATE & TIME | VENUE | STAFF | EVENT |
| Friday 04-11-2022 09:00 to 10:00 | Bute Building Lecture Theatre D | <u>Dr James Cant</u> | Lecture L9: Underwater sampling techniques 2022-3 BL4251 L9 |
| 09:00 to 10:00 | | | Dual |
| Friday 04-11-2022 10:00 to 11:00 | Bute Building Lecture Theatre D | <u>Dr James Cant</u> - | Practical P1: Exercise 2022-3_BL4251_P1 Dual |
| Semester | 1: Week 9 | | |
| DATE & TIME | VENUE | STAFF | EVENT |
| Friday 11-11-2022 09:00 to 10:00 | Bute Building Lecture theatre D | <u>Dr Miguel Barbosa</u> | Lecture L10: Overfishing in the tropics 2022-3_BL4251_L10 dual |
| Friday | Bute Building | <u>Dr Miguel Barbosa</u> | Tutorial T3: paper discussion |
| 11-11-2022 10:00 to 11:00 | Lecture theatre D | - | 2022-3_BL4251_T3 dual |
| Semester | 1: Week 10 | | |
| DATE & TIME | VENUE | STAFF | EVENT |
| Monday 14-11-2022 10:00 to 11:00 | Biomedical Sciences Building Lecture theatre D | <u>Dr Miguel Barbosa</u> | Lecture L11: Drop-in session []" seminar/podcast Q&A 2022-3_BL4251_L11 dual |
| Friday | Bute Building | <u>Dr Miguel Barbosa</u> | Tutorial T4: Deep sea |
| 18-11-2022 09:00 to 10:00 | Lecture theatre D | | 2022-3_BL4251_T4 dual |
| Semester | 1: Week 11 | | |
| DATE & TIME | VENUE | STAFF | EVENT |
| Friday 25-11-2022 09:00 to 11:00 | Bute Building Lecture Theatre D | <u>Dr Miguel Barbosa</u> | Workshop W3: project presentations 2022-3_BL4251_W3 dual |

BL4251: Reading List

BL4251Click for BL4251 reading list

BL4251: Assessment

Coursework = 100%

BL4251View coursework assessment details for BL4251 (2022/3) in MMS

The following related information applies to all Biology modules:

School of Biology Marking Criteria: See School of Biology Undergraduate Handbook

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 Undergraduate Handbook; All Biology exams will be

conducted online for 2022-23.

Exam timetable:

http://www.st-andrews.ac.uk/students/academic/examinations/examtimetab

lescurrent/

Expected attendance: See School of Biology Undergraduate Handbook for detailed attendance

requirements.

Good Academic Practice & Avoiding Academic

Misconduct:

See School of Biology Undergraduate Handbook

University Student Handbook:

University Student Handbook School of Biology Undergraduate 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.:

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 (<u>Dr Miguel Barbosa</u> <u>mb334@st-andrews.ac.uk</u>) |
| Marking on continuous assessment | The Demonstrator or Module Organiser (<u>Dr Miguel Barbosa mb334@st-andrews.ac.uk</u>) |
| Marking on exams | Module Organiser (<u>Dr Miguel Barbosa</u> <u>mb334@st-andrews.ac.uk</u>) |
| Rearranging practical days | <u>Dr Susan Gurney</u> |
| Absence and/or extensions | Module Organiser (<u>Dr Miguel Barbosa mb334@st-andrews.ac.uk</u>) and the Biology Teaching Office (<u>bioteach@st-andrews.ac.uk</u>) |
| Difficulties with academic progress which impact more than one module: | Year Coordinator See <u>School of Biology Undergraduate student handbook</u> for list: http://biology.st-andrews.ac.uk/documents/UndergraduateHandbook.pdf |
| Overall performance, progress or future directions: | Advisor of Studies |
| Disability: | Disability Coordinator (<u>Dr Jacqueline Nairn</u> jn37@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, North Haugh, St Andrews, Fife KY16 9ST

Email: bioteach@st-andrews.ac.uk

Tel: 01334 463602/3566

BL4251: Contributing Staff



Dr Miguel Barbosa (Module Organiser)

Associate Lecturer (Education mb334@st-andrews.ac.uk Focussed)



Dr Miguel Barbosa (Module Organiser)

Associate Lecturer (Education Focussed)

mb334@st-andrews.ac.uk

Dr James Cant

Research Fellow

jic2@st-andrews.ac.uk



Prof Maria Dornelas

Professor

maadd@st-andrews.ac.uk



Mr Garrett Fundakowski

Postgraduate Student

gf64@st-andrews.ac.uk

BL4251: Learning Outcomes

Students completing module BL4251 successfully should be able to:

- 6. Understanding of the scientific approaches and techniques used to tackle scientific questions relating to tropical marine biology
- 1. Understanding of mangrove, seagrass and coral reef ecology
- 2. Understanding of the biology and physiology of corals
- 3. Ability to identify the major phyla associated with tropical marine ecosystems
- 4. Understanding of the threats to tropical marine habitats
- 5. Awareness of current research trends on tropical marine systems
- 7. Understanding the principles of social ecological management in marine conservation

BL4251: Acquired Skills

Practical Skills

- Fieldwork safety awareness
- Scientific diving

Transferable Skills

- Conducting interviews
- Group discussion leading
- Group discussion participating
- Long individual presentation on given topic (>15 min)
- Podcast
- Short group presentation on given topic (up to 15 min)
- Short individual presentation on given topic (up to 15 min)
- Short individual presentation on project idea (up to 15 min)
- "Full" practical write-up (Intro, Methods, Results, Discussion)
- Blog
- Handout (for presentation or poster)
- Project report
- Research proposal
- Response to comments on proposal
- Critically evaluating sources/information
- Finding information on the web
- Finding literature
- Referencing
- Searching databases
- Sourcing figures/tables
- Ethical considerations
- Generating questions
- Peer assessment
- Reflective analysis
- Self assessment
- Critiquing experimental design
- Designing experiments
- Sustainability Related Skills
- Organising group work

Policies

(Information in this section applies to all Biology Modules)

- The procedures and regulations followed by the School of Biology are outlined in the <u>University Handbook</u> and in the <u>School of Biology Undergraduate Handbook</u>
 (https://synergy.st-andrews.ac.uk/biocurrentstudent/files/2017/09/UndergraduateHandbook.pdf).
- 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 Undergraduate Handbook 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/