

# BL4274 Evolutionary Developmental Biology

(BL4274 online module handbook version 17)

**Credits:** 15

**Semester:** 1

**Module Organiser**

Prof Dave Ferrier

[dekf@st-andrews.ac.uk](mailto:dekf@st-andrews.ac.uk)

01334 463480

**Pre-requisite Modules:**

Permission of Biology

Honours Adviser required

**Anti-requisite Modules:**

**Post-requisite Modules:**

**Additional Module**

**Information:**

[Please check MMS regularly for additional module information](#)

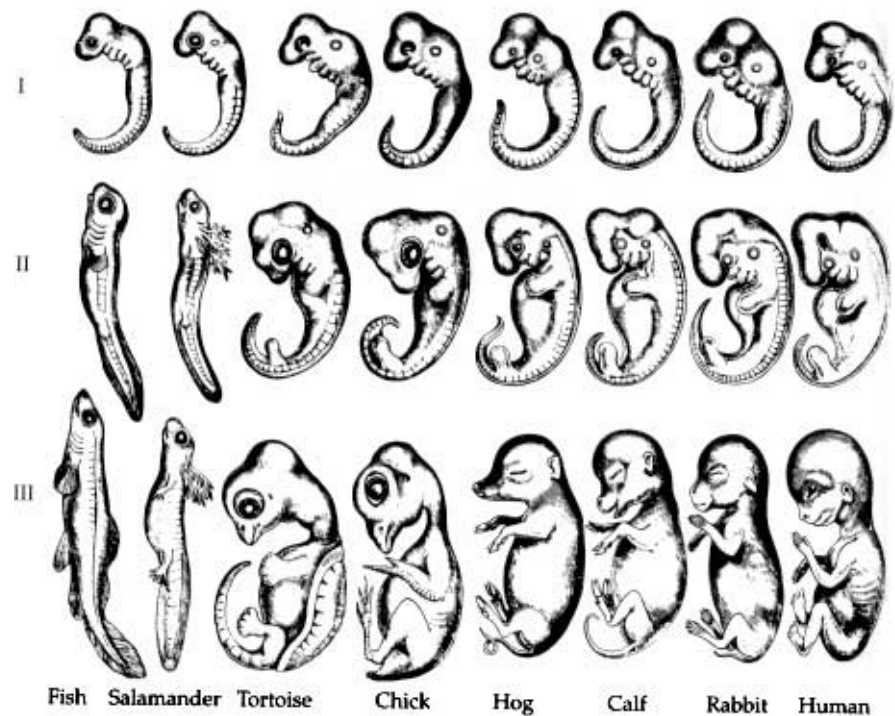


image: Ernst Haeckel's phylotypic stage

Evolution of new morphologies involves changes to the development of organisms. The field of evolutionary developmental biology is thus established as a major and essential component of any comprehensive understanding of evolutionary biology. This module aims to cover some of the main, current themes in evolutionary developmental biology.

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[BL4274View content for BL4274 \(2023/4\) in the Module Management System \(MMS\)](#)

[View the current Biology Online Module Catalogue for BL4274](#)

[BL4274View BL4274 \(2023/4\) in the University of St Andrews Module Catalogue](#)

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# BL4274: Timetable

**Legend** (not all modules have every event type):

lecture	tutorial	workshop	practical	other
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## Semester 1: Week 1

DATE & TIME	VENUE	STAFF	EVENT
Monday 11-09-2023 15:00 to 17:00	Scottish Oceans Institute SOI corner seminar room	<a href="#">Prof Dave Ferrier</a> -	Lecture L1: <b>Module introduction and Animal Phylogeny lecture</b> <small>2023-4_BL4274_L1</small>

## Semester 1: Week 2

DATE & TIME	VENUE	STAFF	EVENT
Monday 18-09-2023 15:00 to 17:00	Scottish Oceans Institute SOI corner seminar room	<a href="#">Dr Carmel McDougall</a> -	Tutorial T1: <b>Topic 1 - student-led class discussion</b> <small>2023-4_BL4274_T1</small> See handbook on Moodle for further details.

## Semester 1: Week 3

DATE & TIME	VENUE	STAFF	EVENT
Monday 25-09-2023 15:00 to 17:00	Scottish Oceans Institute SOI corner seminar room	<a href="#">Prof Dave Ferrier</a> -	Tutorial T2: <b>Discussion of a formative piece of writing, and a review of common techniques in Evo-Devo</b> <small>2023-4_BL4274_T2</small> See handbook on Moodle for further details.

## Semester 1: Week 4

DATE & TIME	VENUE	STAFF	EVENT
Monday 02-10-2023 15:00 to 17:00	Scottish Oceans Institute SOI corner seminar room	<a href="#">Prof Dave Ferrier</a> -	Tutorial T3: <b>Topic 2 - student-led class discussion</b> <small>2023-4_BL4274_T3</small> See handbook on Moodle for further details.

## Semester 1: Week 5

DATE & TIME	VENUE	STAFF	EVENT
Monday 09-10-2023 15:00 to 17:00	Scottish Oceans Institute SOI corner seminar room	<a href="#">Prof Dave Ferrier</a> -	Tutorial T4: <b>Topic 3 - Feedback class on practise essay.</b> <small>2023-4_BL4274_T4</small> See handbook on Moodle for further details.

## Semester 1: Week 7

DATE & TIME	VENUE	STAFF	EVENT
Tuesday 24-10-2023 15:00 to 17:00	Scottish Oceans Institute SOI corner seminar room	<a href="#">Prof Dave Ferrier</a> Dr Marcus Bischoff	Tutorial T5: <b>Assessed Fellowship proposal presentations and discussion.</b> <small>2023-4_BL4274_T5</small> See handbook on Moodle for further details.

## Semester 1: Week 8

DATE & TIME	VENUE	STAFF	EVENT
Monday 30-10-2023 15:00 to 17:00	Scottish Oceans Institute SOI corner seminar room	<a href="#">Prof Dave Ferrier</a> -	Tutorial T6: <b>Paper critique class</b> <small>2023-4_BL4274_T6</small> See handbook on Moodle for further details.

## Semester 1: Week 9

DATE & TIME	VENUE	STAFF	EVENT
Monday 06-11-2023 15:00 to 17:00	Scottish Oceans Institute SOI corner seminar room	<a href="#">Prof Dave Ferrier</a> -	Tutorial T7: <b>Assessed essay preparation class.</b> <small>2023-4_BL4274_T7</small> See handbook on Moodle for further details.

## Semester 1: Week 10

DATE & TIME	VENUE	STAFF	EVENT
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Monday 13-11-2023 15:00 to 17:00	Scottish Oceans Institute SOI corner seminar room	<a href="#">Prof Dave Ferrier</a> -	Other O1: <b>Debate</b> <a href="#">2023-4_BL4274_01</a> See handbook on Moodle for further details.
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## Semester 1: Week 11

DATE & TIME	VENUE	STAFF	EVENT
Monday 20-11-2023 15:00 to 17:00	Scottish Oceans Institute SOI corner seminar room	<a href="#">Prof Dave Ferrier</a> -	Other O2: <b>Feedback class and module review</b> <a href="#">2023-4_BL4274_02</a>

# BL4274: Reading List

[BL4274Click for BL4274 reading list](#)

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## BL4274: Assessment

Coursework = 100%

[BL4274View coursework assessment details for BL4274 \(2023/4\) in MMS](#)

The following related information applies to all Biology modules:

School of Biology Marking Criteria:	See <a href="#">JH booklet info (st-andrews.ac.uk)</a>
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 <a href="#">JH booklet info (st-andrews.ac.uk)</a> : All Biology exams will be conducted online for 2022-23.
Exam timetable:	See <a href="#">Timetables - Exams - University of St Andrews (st-andrews.ac.uk)</a>
Expected attendance:	See <a href="#">JH booklet info (st-andrews.ac.uk)</a> for detailed attendance requirements.
Good Academic Practice & Avoiding Academic Misconduct:	See <a href="#">JH booklet info (st-andrews.ac.uk)</a>
University Student Handbook:	<a href="#">University Student Handbook</a>
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.:	<a href="#">JH booklet info (st-andrews.ac.uk)</a> <a href="#">University Student Handbook</a>

# 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

General teaching matters  
Rescheduled or cancelled events  
Lecture or practical content  
Completing assessed practical assignments  
Completing assessments  
Marking on continuous assessment  
Marking on exams  
Rearranging practical days  
Absence and/or extensions  
Difficulties with academic progress which impact more than one module:  
Overall performance, progress or future directions:  
Disability:  
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:

## University assistance with urgent matters out of office hours:

## Contact

Biology Teaching Office ( [bioteach@st-andrews.ac.uk](mailto:bioteach@st-andrews.ac.uk) )  
Check your University email  
The lecturer who presented the material  
The lecturer who set the assignment  
Module Organiser ( [Prof Dave Ferrier dekf@st-andrews.ac.uk](mailto:Prof Dave Ferrier dekf@st-andrews.ac.uk) )  
The Demonstrator or Module Organiser ( [Prof Dave Ferrier dekf@st-andrews.ac.uk](mailto:Prof Dave Ferrier dekf@st-andrews.ac.uk) )  
Module Organiser ( [Prof Dave Ferrier dekf@st-andrews.ac.uk](mailto:Prof Dave Ferrier dekf@st-andrews.ac.uk) )  
Module Organiser ( [Prof Dave Ferrier dekf@st-andrews.ac.uk](mailto:Prof Dave Ferrier dekf@st-andrews.ac.uk) )  
Module Organiser ( [Prof Dave Ferrier dekf@st-andrews.ac.uk](mailto:Prof Dave Ferrier dekf@st-andrews.ac.uk) ) **and** the Biology Teaching Office ( [bioteach@st-andrews.ac.uk](mailto:bioteach@st-andrews.ac.uk) )  
Year Coordinator  
See School of Biology UG Handbook for list: [JH booklet info \(st-andrews.ac.uk\)](http://www.st-andrews.ac.uk/jh-booklet-info)  
Advisor of Studies  
Disability Coordinator ( [biodisabilities@st-andrews.ac.uk](mailto:biodisabilities@st-andrews.ac.uk) )  
Advice & Support Centre  
Address: 79 North Street, St Andrews  
Email: [theasc@st-andrews.ac.uk](mailto:theasc@st-andrews.ac.uk)  
Web: <https://www.standrews.ac.uk/ask-a-question/>  
Tel: 01334 462020  
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](mailto:bioteach@st-andrews.ac.uk)

Tel: 01334 46 3602 or 3566

## BL4274: Contributing Staff

**Prof Dave Ferrier**  
**(Module Organiser)**

Reader in Biology and Deputy  
Director of the Scottish Oceans  
Institute

[dekf@st-andrews.ac.uk](mailto:dekf@st-andrews.ac.uk)

Dr Marcus Bischoff

Lecturer

[mb273@st-andrews.ac.uk](mailto:mb273@st-andrews.ac.uk)

Prof Dave Ferrier  
(Module Organiser)

Reader in Biology and Deputy  
Director of the Scottish Oceans  
Institute

[dekf@st-andrews.ac.uk](mailto:dekf@st-andrews.ac.uk)

Dr Carmel McDougall

Lecturer in Marine Biology

[cm107@st-andrews.ac.uk](mailto:cm107@st-andrews.ac.uk)

## **BL4274: Learning Outcomes**

Students completing module BL4274 successfully should be able to:

- Communicate a deep and balanced appreciation of the evolutionary developmental biology questions and controversies being considered, both verbally and in writing.
- Find up-to-date, relevant primary research literature that is critically evaluated.
- Exhibit verbal communication skills that demonstrate the ability to distil a synthesis of research on a topic into a short verbal presentation supported with visual aids.
- Conduct a verbal discussion to develop the understanding of the entire group and incorporate views and information provided by all group members.
- Develop questions about a topic in evolutionary developmental biology that improves the understanding of both the questioner and the group.
- Clearly articulate a critical evaluation of chosen topics in evolutionary developmental biology via essay writing.



# **BL4274: Acquired Skills**

## **Practical Skills**

## **Transferable Skills**

- Group discussion - leading
- Group discussion - participating
- Journal club
- Long individual presentation on given topic (>15 min)
- Short individual presentation on given topic (up to 15 min)
- Short individual presentation on project idea (up to 15 min)
- Long essay (>2000 words)
- Research proposal
- Critically evaluating sources/information
- Finding literature
- Referencing
- Sourcing figures/tables
- Generating questions
- Peer assessment
- Critiquing experimental design
- Designing experiments

# 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 handbook [JH booklet info \(st-andrews.ac.uk\)](#)
- 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 handbook [JH booklet info \(st-andrews.ac.uk\)](#) 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/>