

BL3311 Infection and Disease

(BL3311 online module handbook version 32)

Credits: 20

Semester: 2

Module Organiser

Dr Peter Coote

pjc5@st-andrews.ac.uk

01334 463406

Pre-requisite Modules:

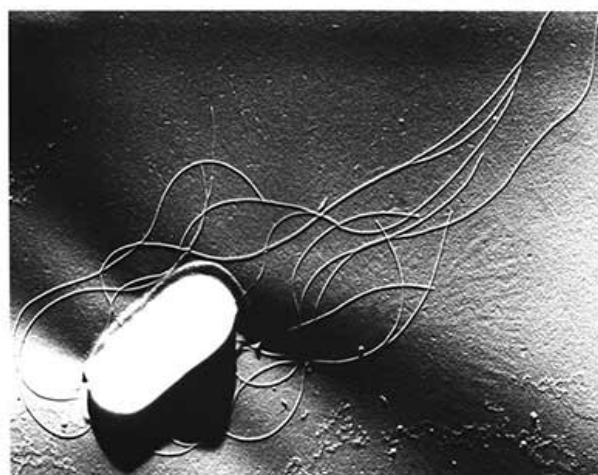
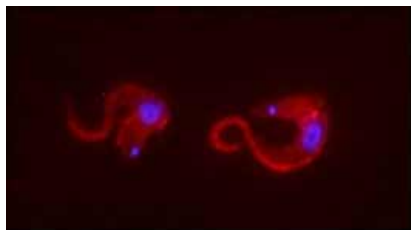
Before taking this module you must pass 2 modules from {BL2301, BL2302, BL2309}.

Anti-requisite Modules:

Post-requisite Modules:

Additional Module Information:

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



This module has lectures in three component areas: parasite infections, viral disease, and pathogenicity of common bacterial infections, and will include consideration of host defences and effective treatment. In all three component areas the emphasis will be on understanding at the molecular level.

[BL3311View content for BL3311 \(2023/4\) in the Module Management System \(MMS\)](#)

[View the current Biology Online Module Catalogue for BL3311](#)

[BL3311View BL3311 \(2023/4\) in the University of St Andrews Module Catalogue](#)

Contents:

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

BL3311: Timetable

Legend (not all modules have every event type):

lecture	tutorial	workshop	practical	other
---------	----------	----------	-----------	-------

Semester 2: Week 1

DATE & TIME	VENUE	STAFF	EVENT
Monday 15-01-2024 10:00 to 11:00	Mathematical Institute LTB	Dr Peter Coote -	Lecture L1: Introduction - relevance of infectious disease 2023-4_BL3311_L1 Intro lecture with detail on assessment etc.
Tuesday 16-01-2024 10:00 to 11:00	Mathematical Institute LTB	Dr Peter Coote -	Lecture L2: Pathogenicity - toll-like receptors; cytokines; inflammation; sepsis 2023-4_BL3311_L2
Wednesday 17-01-2024 10:00 to 11:00	Mathematical Institute LTC	Dr Simon Young -	Lecture L3: Antibody and cell-mediated immunity 2023-4_BL3311_L3

Semester 2: Week 2

DATE & TIME	VENUE	STAFF	EVENT
Tuesday 23-01-2024 10:00 to 11:00	Other Utd College School II	Dr Simon Young -	Lecture L4: Important human viruses: An introduction 2023-4_BL3311_L4
Tuesday 23-01-2024 14:00 to 17:00	Biomolecular Sciences Building Teaching Lab	Dr Michael M Nevels -	Practical P1: Virology Practical 2023-4_BL3311_P1
Wednesday 24-01-2024 10:00 to 11:00	Other Utd College School II	Dr Simon Young -	Lecture L5: What it takes to be a virus! 2023-4_BL3311_L5
Wednesday 24-01-2024 14:00 to 17:00	Biomolecular Sciences Building Teaching Lab	Dr Michael M Nevels -	Practical P2: Virology Practical 2023-4_BL3311_P2
Thursday 25-01-2024 14:00 to 17:00	Biomolecular Sciences Building Teaching Lab	Dr Michael M Nevels -	Practical P3: Virology Practical 2023-4_BL3311_P3
Friday 26-01-2024 14:00 to 17:00	Biomolecular Sciences Building Teaching Lab	Dr Michael M Nevels -	Practical P4: Virology Practical 2023-4_BL3311_P4

Semester 2: Week 3

DATE & TIME	VENUE	STAFF	EVENT
Monday 29-01-2024 10:00 to 11:00	Mathematical Institute LTB	Dr Simon Young -	Lecture L6: Viruses and disease I 2023-4_BL3311_L6
Tuesday 30-01-2024 10:00 to 11:00	Mathematical Institute LTB	Dr Simon Young -	Lecture L7: Viruses and disease II 2023-4_BL3311_L7
Wednesday 31-01-2024 10:00 to 11:00	Mathematical Institute LTC	Dr Simon Young -	Lecture L8: Control of virus diseases 2023-4_BL3311_L8

Semester 2: Week 4

DATE & TIME	VENUE	STAFF	EVENT
Monday 05-02-2024 10:00 to 11:00	Mathematical Institute LTB	Dr Simon Young -	Lecture L9: Virus vaccines I 2023-4_BL3311_L9
Tuesday 06-02-2024 10:00 to 11:00	Mathematical Institute LTB	Dr Simon Young -	Lecture L10: Virus vaccines II 2023-4_BL3311_L10

Wednesday 07-02-2024 10:00 to 11:00	Mathematical Institute LTC	Dr Simon Young -	Lecture L11: Antiviral drugs I 2023-4_BL3311_L11
---	-------------------------------	-------------------------------------	--

Semester 2: Week 5

DATE & TIME	VENUE	STAFF	EVENT
Monday 12-02-2024 10:00 to 11:00	Mathematical Institute LTB	Dr Simon Young -	Lecture L12: Antiviral drugs II 2023-4_BL3311_L12
Tuesday 13-02-2024 10:00 to 11:00	Mathematical Institute LTB	Prof Terry Smith -	Lecture L13: Introduction to parasitology 2023-4_BL3311_L13
Wednesday 14-02-2024 10:00 to 11:00	Mathematical Institute LTC	Prof Terry Smith -	Lecture L14: Trypanosomatids/Apicomplexa; relevance to human health; current therapies 2023-4_BL3311_L14

Semester 2: Week 6

DATE & TIME	VENUE	STAFF	EVENT
Monday 19-02-2024 10:00 to 11:00	Mathematical Institute LTB	Prof Terry Smith -	Lecture L15: T. brucei - Cell-surface Variant Surface Glycoprotein; antigenic variation 2023-4_BL3311_L15
Monday 19-02-2024 14:00 to 17:00	Biomolecular Sciences Building Teaching Lab	Prof Terry Smith -	Practical P5: Parasitology Practical 2023-4_BL3311_P5
Tuesday 20-02-2024 10:00 to 11:00	Mathematical Institute LTB	Prof Terry Smith -	Lecture L16: Structure determination and function of T. brucei/parasite GPI anchors 2023-4_BL3311_L16
Tuesday 20-02-2024 14:00 to 17:00	Biomolecular Sciences Building Teaching Lab	Prof Terry Smith -	Practical P6: Parasitology Practical 2023-4_BL3311_P6
Wednesday 21-02-2024 10:00 to 11:00	Mathematical Institute LTC	Prof Terry Smith -	Lecture L17: Parasite genomes; genetic validation; techniques - conditional knockout and RNAi 2023-4_BL3311_L17
Thursday 22-02-2024 14:00 to 17:00	Biomolecular Sciences Building Teaching Lab	Prof Terry Smith -	Practical P7: Parasitology Practical 2023-4_BL3311_P7
Friday 23-02-2024 14:00 to 17:00	Biomolecular Sciences Building Teaching Lab	Prof Terry Smith -	Practical P8: Parasitology Practical 2023-4_BL3311_P8

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

Semester 2: Week 7

DATE & TIME	VENUE	STAFF	EVENT
Monday 04-03-2024 10:00 to 11:00	Mathematical Institute LTB	Prof Terry Smith -	Lecture L18: Biochemical phenotyping 2023-4_BL3311_L18
Tuesday 05-03-2024 10:00 to 11:00	Mathematical Institute LTB	Prof Terry Smith -	Lecture L19: Drug discovery pipeline; from targets to lead compounds 2023-4_BL3311_L19
Wednesday 06-03-2024 10:00 to 11:00	Mathematical Institute LTC	Prof Terry Smith -	Lecture L20: Current research and methods/techniques used in the TKS group 2023-4_BL3311_L20

Semester 2: Week 8

DATE & TIME	VENUE	STAFF	EVENT
Monday 11-03-2024 10:00 to 11:00	Mathematical Institute LTB	Dr Peter Coote -	Lecture L21: Introduction and Revision Lecture 2023-4_BL3311_L21

Tuesday 12-03-2024 10:00 to 11:00	Mathematical Institute LTB	Dr Peter Coote -	Lecture L22: Staphylococcus species - pathogenicity and disease 2023-4_BL3311_L22
Wednesday 13-03-2024 10:00 to 11:00	Mathematical Institute LTC	Dr Peter Coote -	Lecture L23: Streptococcus species - pathogenicity and disease 2023-4_BL3311_L23

Semester 2: Week 9

DATE & TIME	VENUE	STAFF	EVENT
Monday 18-03-2024 10:00 to 11:00	Mathematical Institute LTB	Dr Peter Coote -	Lecture L24: Tuberculosis - pathogenicity and disease 2023-4_BL3311_L24
Tuesday 19-03-2024 10:00 to 11:00	Mathematical Institute LTB	Dr Peter Coote -	Lecture L25: Cholera - pathogenicity and disease 2023-4_BL3311_L25
Wednesday 20-03-2024 10:00 to 11:00	Mathematical Institute LTC	Dr Peter Coote -	Lecture L26: Typhoid - pathogenicity and disease 2023-4_BL3311_L26

Semester 2: Week 10

DATE & TIME	VENUE	STAFF	EVENT
Monday 25-03-2024 10:00 to 11:00	Mathematical Institute LTB	Dr Peter Coote -	Lecture L27: Neisseria species - pathogenicity and disease 2023-4_BL3311_L27
Monday 25-03-2024 14:00 to 17:00	Biomolecular Sciences Building Teaching Lab	Dr Peter Coote -	Practical P9: Bacteriology Practical 2023-4_BL3311_P9
Tuesday 26-03-2024 10:00 to 11:00	Mathematical Institute LTB	Dr Peter Coote -	Lecture L28: Hospital infection and antibiotic resistance 2023-4_BL3311_L28
Tuesday 26-03-2024 14:00 to 17:00	Biomolecular Sciences Building Teaching Lab	Dr Peter Coote -	Practical P10: Bacteriology Practical 2023-4_BL3311_P10
Wednesday 27-03-2024 10:00 to 11:00	Mathematical Institute LTC	Dr Peter Coote -	Lecture L29: Germ warfare - Yersinia pestis plague and Bacillus anthracis anthrax 2023-4_BL3311_L29
Thursday 28-03-2024 14:00 to 17:00	Biomolecular Sciences Building Teaching Lab	Dr Peter Coote -	Practical P11: Bacteriology Practical 2023-4_BL3311_P11
Friday 29-03-2024 14:00 to 17:00	Biomolecular Sciences Building Teaching Lab	Dr Peter Coote -	Practical P12: Bacteriology Practical 2023-4_BL3311_P12

Semester 2: Week 11

DATE & TIME	VENUE	STAFF	EVENT
Friday 05-04-2024 10:00 to 11:30	Online MMS online class practical test	Dr Peter Coote -	Other O1: Practical examination/class test 2023-4_BL3311_O1 Short Answer Questions on delivered online practical material

BL3311: Reading List

[BL3311Click for BL3311 reading list](#)

BL3311: Assessment

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

[BL3311View coursework assessment details for BL3311 \(2023/4\) in MMS](#)

The following related information applies to all Biology modules:

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

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)
Check your University email
The lecturer who presented the material
The lecturer who set the assignment
Module Organiser (Dr Peter Coote pjc5@st-andrews.ac.uk)
The Demonstrator or Module Organiser (Dr Peter Coote pjc5@st-andrews.ac.uk)
Module Organiser (Dr Peter Coote pjc5@st-andrews.ac.uk)
Module Organiser (Dr Peter Coote pjc5@st-andrews.ac.uk)
Module Organiser (Dr Peter Coote pjc5@st-andrews.ac.uk)
and the Biology Teaching Office (bioteach@st-andrews.ac.uk)
Year Coordinator
See School of Biology UG Handbook for list:
[JH booklet info \(st-andrews.ac.uk\)](#)
Advisor of Studies
Disability Coordinator (biodisabilities@st-andrews.ac.uk)
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
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

BL3311: Contributing Staff

[Dr Peter Coote](#)
(Module Organiser)

Lecturer

pjc5@st-andrews.ac.uk

[Dr Peter Coote](#)
(Module Organiser)

Lecturer

pjc5@st-andrews.ac.uk

[Dr Michael M Nevels](#)

Reader in Virology

mmn3@st-andrews.ac.uk

[Prof Terry Smith](#)

Professor

tksl@st-andrews.ac.uk

[Dr Simon Young](#)

Associate Lecturer (Education
focused)

say2@st-andrews.ac.uk

BL3311: Learning Outcomes

Students completing module BL3311 successfully should be able to:

- Discuss key human microbial pathogens (bacteria, viruses, parasites) and the diseases they cause.
- Use the primary literature to research the latest understanding of key topics and summarise this in essay form
- Work safely in the laboratory with a selection of microbial pathogens
- Analyse and interpret experimental data from a range of techniques used to study microorganisms

BL3311: Acquired Skills

Practical Skills

Transferable Skills

- Review article on given topic
- Finding literature
- Concentrations
- Dilutions
- Produce graphs/figures
- Lab or field notebook
- Working in pairs/small groups

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/>