

BL4213 Molecular Virology

(BL4213 online module handbook version 101)

Credits: 15

Semester: 2

Module Organiser

Dr Simon Young

say2@st-andrews.ac.uk

01334 463417

Pre-requisite Modules:

Before taking this module
you must pass BL3311

Anti-requisite Modules:

Post-requisite Modules:

Additional Module

Information:

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



Viruses cause clinically and economically important human and animal diseases, examples include influenza viruses, HIV and foot and mouth disease virus, as well as emerging viruses such as ebola virus and coronaviruses. The module will consist of a mixture of lectures, group and student-led learning activities. You will (i) gain knowledge in 4 key topics in molecular virology, (ii) acquire understanding of commonly used molecular techniques used to study viruses (obtained via reading, interpretation and discussion of recent research papers in virology rather than practical class content) and (iii) explore virus-related topics that have made headline news.

[BL4213View content for BL4213 \(2023/4\) in the Module Management System \(MMS\)](#)

[View the current Biology Online Module Catalogue for BL4213](#)

[BL4213View BL4213 \(2023/4\) in the University of St Andrews Module Catalogue](#)

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BL4213: Timetable

Legend (not all modules have every event type):

lecture	tutorial	workshop	practical	other
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Semester 2: Week 1

DATE & TIME	VENUE	STAFF	EVENT
Wednesday 17-01-2024 12:00 to 13:00	Butts Wynd Room 9	Dr Simon Young -	Lecture L1: Introduction to the module 2023-4_BL4213_L1
Friday 19-01-2024 12:00 to 13:00	Biomolecular Sciences Building Seminar room	Dr Susan Gurney -	Lecture L2: How to read and interpret a research paper 2023-4_BL4213_L2

Semester 2: Week 2

DATE & TIME	VENUE	STAFF	EVENT
Wednesday 24-01-2024 12:00 to 13:00	Butts Wynd Room 9	Dr Susan Gurney -	Lecture L3: Topic 1: Emerging viruses I 2023-4_BL4213_L3
Friday 26-01-2024 12:00 to 13:00	Biomolecular Sciences Building Seminar room	Dr Susan Gurney -	Lecture L4: Topic 1: Emerging viruses II 2023-4_BL4213_L4

Semester 2: Week 3

DATE & TIME	VENUE	STAFF	EVENT
Wednesday 31-01-2024 12:00 to 13:00	Purdie Building Lecture theatre D	Dr Susan Gurney -	Workshop W1: Topic 1: Emerging viruses 2023-4_BL4213_W1
Friday 02-02-2024 12:00 to 13:00	Biomolecular Sciences Building Seminar room	Dr Susan Gurney -	Lecture L5: Topic 1: Emerging viruses III 2023-4_BL4213_L5

Semester 2: Week 4

DATE & TIME	VENUE	STAFF	EVENT
Wednesday 07-02-2024 10:00 to 12:00	Biomolecular Sciences Building Seminar room	Dr Susan Gurney -	Tutorial T1: Bacteriophages for phage therapy and introduction to assessment I 2023-4_BL4213_T1

Semester 2: Week 5

DATE & TIME	VENUE	STAFF	EVENT
Wednesday 14-02-2024 12:00 to 13:00	Purdie Building Lecture theatre D	Dr Jens Tilsner -	Lecture L6: Topic 2: Virus replication & manipulation of host cells I 2023-4_BL4213_L6
Friday 16-02-2024 12:00 to 13:00	Biomolecular Sciences Building Seminar room	Dr Jens Tilsner -	Lecture L7: Topic 2: Virus replication & manipulation of host cells I 2023-4_BL4213_L7

Semester 2: Week 6

DATE & TIME	VENUE	STAFF	EVENT
Wednesday 21-02-2024 12:00 to 13:00	Purdie Building Lecture theatre D	Dr Jens Tilsner -	Workshop W2: Topic 2: Virus replication & manipulation of host cells 2023-4_BL4213_W2

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

Semester 2: Week 7

DATE & TIME	VENUE	STAFF	EVENT
Wednesday 06-03-2024 12:00 to 13:00	Purdie Building Lecture theatre D	Dr Michael M Nevels -	Lecture L8: Topic 3: Viruses & Cancer I 2023-4_BL4213_L8

Friday 08-03-2024 12:00 to 13:00	Biomolecular Sciences Building Seminar room	Dr Michael M Nevels -	Lecture L9: Topic 3: Viruses & Cancer II 2023-4_BL4213_L9
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Semester 2: Week 8

DATE & TIME	VENUE	STAFF	EVENT
Wednesday 13-03-2024 12:00 to 13:00	Purdie Building Lecture theatre D	Dr Michael M Nevels -	Workshop W3: Topic 3: Viruses & Cancer 2023-4_BL4213_W3

Semester 2: Week 9

DATE & TIME	VENUE	STAFF	EVENT
Wednesday 20-03-2024 12:00 to 13:00	Purdie Building Lecture theatre D	Dr Elizabeth Wignall-Fleming Dr Simon Young	Lecture L10: Topic 4: Viruses & Innate Immunity I 2023-4_BL4213_L10
Friday 22-03-2024 12:00 to 13:00	Biomolecular Sciences Building Seminar room	Dr Elizabeth Wignall-Fleming Dr Simon Young	Lecture L11: Topic 4: Viruses & Innate Immunity II 2023-4_BL4213_L11

Semester 2: Week 10

DATE & TIME	VENUE	STAFF	EVENT
Wednesday 27-03-2024 12:00 to 13:00	Purdie Building Lecture theatre D	Dr Elizabeth Wignall-Fleming Dr Simon Young	Workshop W4: Topic 4: Viruses & Innate Immunity 2023-4_BL4213_W4

Semester 2: Week 11

DATE & TIME	VENUE	STAFF	EVENT
Wednesday 03-04-2024 12:00 to 13:00	Purdie Building Lecture theatre D	Dr Simon Young -	Tutorial T2: Module summary and revision Q&A 2023-4_BL4213_T2
Friday 05-04-2024 12:00 to 13:00	Biomedical Sciences Building Seminar room	jt58,smrw,mmn3 -	Tutorial T3: Module revision Q&A 2023-4_BL4213_T3

BL4213: Reading List

[BL4213 Click for BL4213 reading list](#)

BL4213: Assessment

90 min Written Examination = 40%, Coursework = 60%

[BL4213 View coursework assessment details for BL4213 \(2023/4\) 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 Simon Young say2@st-andrews.ac.uk)
The Demonstrator or Module Organiser (Dr Simon Young say2@st-andrews.ac.uk)
Module Organiser (Dr Simon Young say2@st-andrews.ac.uk)
Module Organiser (Dr Simon Young say2@st-andrews.ac.uk)
Module Organiser (Dr Simon Young say2@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 \(st-andrews.ac.uk\)](http://www.st-andrews.ac.uk/jh-booklet-info)
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

BL4213: Contributing Staff

Dr Simon Young
(Module Organiser)

Associate Lecturer (Education
focused)

say2@st-andrews.ac.uk

Dr Susan Gurney

Associate Lecturer in Biology

smrw@st-andrews.ac.uk

Dr Michael M Nevels

Reader in Virology

mmn3@st-andrews.ac.uk

Dr Jens Tilsner

Lecturer

jt58@st-andrews.ac.uk

Dr Elizabeth Wignall-Fleming

Research Fellow

ewf2@st-andrews.ac.uk

Dr Simon Young
(Module Organiser)

Associate Lecturer (Education
focused)

say2@st-andrews.ac.uk

BL4213: Learning Outcomes

Students completing module BL4213 successfully should be able to:

- Understand the factors that lead to the emergence and re-emergence of viruses and why such viruses remain a continual threat to human health and well-being.
- Appreciate that viruses reprogramme cells in order to promote virus replication and that different viruses reprogramme cells in different ways that affects disease outcomes.
- Recognize the importance of viruses as underlying causes of specific cancers and understand, at the molecular level, how viruses can cause cancer.
- Realize that viruses counteract innate cellular defence mechanisms in different ways and that the way they do so affects disease outcomes.
- Students will gain skills in reading and interpreting recent research papers in molecular virology
- Students will gain an understanding of molecular techniques commonly used to study viruses.
- Students will be able to discuss virus-related topics that have recently made headline news.

BL4213: Acquired Skills

Practical Skills

Transferable Skills

- Group discussion - participating
- Journal club
- Short informal presentation (using PowerPoint or not)
- Completing a research paper from which sections have been removed
- Opinion piece
- Critically evaluating sources/information
- Finding information on the web
- Generating questions
- Online learning
- Peer assessment
- Problem-solving questions
- Organising group work
- 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/>