MODULE SPECIFICATION

Academic Year (student cohort covered by specification)	2021-22
Module Code	IDM204
Module Title	Viral Infections
Module Organiser(s)	Dr Michael Gaunt
Contact email	The LSHTM distance learning programmes and modules are run in collaboration with University of London Worldwide. Enquiries may be made via the Student Advice Centre. (Enquiries from face-to-face i.e. London-based the LSHTM MSc or research students regarding study of DL modules should be emailed to distance@lshtm.ac.uk.)
Faculty	Infectious & Tropical Diseases: The London School of Hygiene & Tropical Medicine https://www.lshtm.ac.uk/research/faculties/itd
FHEQ Level	Level 7
Credit Value	**CATS:** 15 **ECTS:** 7.5
HECoS Code	100265:100345 (1:1)
Mode of Delivery	Distance Learning
Mode of Study	Directed self-study, through provided and online materials
Language of Study	English
Pre-Requisites	Those who wish to study this module as an individual module or as part of another programme should have a prior knowledge of basic biochemistry, cell biology, genetics and basic immunology in order to be able to work through and benefit fully from this module.
Accreditation by Professional Statutory and Regulatory Body	None
Module Cap (Maximum number of students)	None
Target Audience	This module is intended for those who wish to understand the principles of virology, the role of viruses in important human diseases and the possible ways to prevent their dissemination.

Module Description	The module equips students with the knowledge to understand the principles of virology in important human diseases and the possible ways to prevent their dissemination. The aim of the module is to undertake a systematic overview of the important current and emergent viruses causing infections in humans. The module is intended for those with prior knowledge in basic biochemistry, cell biology, genetics and possibly basic immunology. The five learning outcomes for the module are described below.
Duration	Distance learning module studies begin in early October. Students may start their studies at any time from receipt of study materials and work through the material until the start of the June examinations (although assessment submission deadlines which are earlier than this must be observed).
Last Revised (e.g. year changes approved)	November/2020

Programme(s) This module is linked to the following programme(s)	**Status**
PGDip/MSc Infectious Diseases (Distance Learning - University of London Worldwide)	Elective option
PGDip/MSc Clinical Trials (Distance Learning - University of London Worldwide)	Elective option

Module Aim and Intended Learning Outcomes

Overall aim of the module
The overall module aim is to: • undertake a systematic overview of the important current and emerging viruses causing infections in humans.

Module Intended Learning Outcomes
Upon successful completion of the module a student will be able to: 1. Distinguish the different classes of viruses on the basis of their genome and identify the main features of each virus. 2. Describe the mechanisms used by viruses to infect the cells and discuss clearly each step of virus replication. 3. Discuss the pathological aspects of virus infection related to specific virus families. 4. Recognise the role and the impact that some viruses have on public health. 5. Discuss the different approaches used for the prevention and treatment of viral infection including vaccines and antiviral chemotherapies.

Indicative Syllabus

Session Content
The module is expected to cover the following topics: • **Section 1 Introduction to viruses** Section 1 provides the scientific background essential for the understanding of the biology of viruses. It is aimed at students who have a command of cell biology, molecular biology and basic immunology. Supplementary reading is provided for those without the necessary background. The biology of viruses is set in the context of their interactions with humans both as individuals and populations. In this section students will also receive basic information regarding virus classification and different aspects of their life cycle. Important issues such as host resistance are also discussed. • **Section 2 Pathogenic viruses** Section 2 describes the biology of individual viruses, both endemic and emergent, and the diseases they cause. Where the information is available, an indication is given as to numbers of people infected. The organization of this module reflects current understanding of viruses and the way in which they are studied. Their importance as pathogens is indicated but there is no direct link between the extent of the knowledge about a virus and its significance as a pathogen. The ability to investigate a virus is limited by technical considerations. Important issues such as cancer development are also discussed.

Teaching and Learning

Notional Learning Hours

Type of Learning Time	Number of Hours	Expressed as Percentage (%)
Directed self-study	75	50
Self-directed learning	25	17
Assessment, review and revision	50	33
Total	**150**	**100**

Teaching and Learning Strategy
The teaching and learning strategy is structured around an extensive module coursebook, written through the expertise of our module team with associated publications. There is rapid response online support via Moodle. A real-time journal club will be held in January, which is also recorded and available online, that will consolidate skills in critical appraisal of a virology publication.

Assessment

Assessment Strategy
The assessment comprises two components. Firstly, an assessed assignment question of 2500 words on a choice of two subjects, for example antiviral therapy or emergent infections comprising 30% of the grade. Secondly, an exam of 2 hours 15 minutes answering 3 out of 6 questions, comprising 70% of the grade. The assessed assignment and exam will focus on a given group of viruses and assess the learning outcomes of the module.

Summative assessment

Assessment Type	**Assessment Length (i.e. Word Count, Length of presentation in minutes)**	**Weighting** (%)	**Intended Module Learning Outcomes Tested**
Assessed Assignment	2500 words	30	1, 4, 5
Exam	2 hours 15 minutes	70	1 - 5

Assignments for this module can be submitted only once annually, no later than 31st March and must be submitted via the online Assignment Management System.

Unseen written examinations for DL modules are held once a year, in June (including resits).

Exams will be held in accordance with annual UoL guidance. They will be conducted in the same format for all students either online or in international exam centres.

There are over 650 examination centres worldwide. They are arranged mainly through Ministries of Education or the British Council. A list of examination centres can be found at https://london.ac.uk/current-students/examinations/examination-centres.

A local fee will be payable direct to the examination centre. This fee is in addition to the programme/module fee and is set by, and paid directly to, the individual examination centres. The level of local examination centre fees varies across the world and neither the University of London nor the LSHTM have any control over the fee amount.

Resitting assessment
Resits will accord with the LSHTM's Resits Policy. The Resit assessment will be the same assessment type as the first attempt (see previous table).

Resources

Indicative reading list

- Collier, L., Oxford, J., & Kellam, P., (2006) *Human Virology*. 5th Ed. Oxford University Press. ISBN: 0198714688.
- Cann, A., (2015). *Principles of Molecular Virology*. 6th Ed. Academic Press. ISBN: 978-0128019467.

Textbooks will be made available in e-format or hard copy to registered students in early autumn.

Other resources
Study Guide: Paper version
Reader: On-line reading list via the Virtual Learning Environment

In addition to the materials above, students are given access to the **LSHTM Virtual Learning Environment, Moodle** where they can access the study guide, reading list, web-based discussion forums, assignments, supplementary materials and the **LSHTM online library resources**.

Teaching for Disabilities and Learning Differences

The module-specific site on Moodle provides students with access to the module learning materials, including a study guide (with accessible printable versions of sessions) and online reading list (containing essential readings, and textbooks if available), and additional resources including supplementary exercises. All materials posted up on Moodle areas, including computer-based sessions, have been made accessible where possible. The LSHTM Moodle has been made accessible to the widest possible audience, using a VLE that allows for up to 300% zoom, permits navigation via keyboard and use of speech recognition software, and that allows listening through a screen reader. All students have access to "SensusAccess" software which allows conversion of files into alternative formats.

If you have specific, access requirements please contact the Inclusive Practice Manager via special.arrangements@london.ac.uk to request an alternative format of the study guide and for special exam arrangements.