

Liverpool John Moores University

Title: VIRAL INFECTIONS OF PREGNANCY AND CHILDHOOD
Status: Definitive
Code: **7103VMBMOL** (123650)
Version Start Date: 01-08-2021

Owning School/Faculty: Pharmacy & Biomolecular Sciences
Teaching School/Faculty: Pharmacy & Biomolecular Sciences

Team	Leader
Anne Humphreys	Y

Academic Level: FHEQ7 **Credit Value:** 20 **Total Delivered Hours:** 42

Total Learning Hours: 200 **Private Study:** 158

Delivery Options

Course typically offered: Semester 2

Component	Contact Hours
Tutorial	40

Grading Basis: 50 %

Assessment Details

Category	Short Description	Description	Weighting (%)	Exam Duration
Exam	Exam	Written examination	60	2
Essay	Essay	Essay	40	

Aims

1. To introduce students to the basic physiological changes during pregnancy, the immature immune system and their effects as related to virology
2. To provide students with current knowledge of those viruses causing infections of the mother and foetus, the neonate and the early childhood years
3. To critically evaluate both immediate and potential long-term effects of these viral diseases

Learning Outcomes

After completing the module the student should be able to:

- 1 Demonstrate a systematic understanding of the anatomy and physiology of the mammalian female reproductive system and the changes occurring in both mother and foetus during pregnancy
- 2 Discuss those viruses affecting the mother and foetus during the various stages of pregnancy and the birth process
- 3 Appraise how the immune system develops from a reliance on the maternal immunity to individual competence and how tolerance may develop
- 4 Discuss the common viral infections of childhood and in particular the effects of the herpes group of viruses as childhood infections and their long-term implications
- 5 Critically evaluate how foetal, neonatal and childhood infections may differ from the same infections during adolescence and adulthood and the effects these viruses may have on the immunocompromised host

Learning Outcomes of Assessments

The assessment item list is assessed via the learning outcomes listed:

Exam	1	2	3	4	5
Essay	1	2	3	4	5

Outline Syllabus

Structure and role of the female urogenital tract and uterus

Role of the placenta and infections of the placenta and /or foetus

Congenital infections with Rubella, Parvovirus B19, CMV, HSV, VZV

Congenital (vertical) infections, mutagenesis and teratogenesis

Childhood infections with Measles(including SSPE), Mumps, Rubella, HSV, VZV, CMV, EBV, HHV-6, HHV-7, HBV, HIV, Dengue and enteroviruses including poliovirus

Unusual central nervous system manifestations of acute Parvovirus B19 infection

Acute and chronic viral infections, persistence and latency, tolerance and the ontogeny of the immune system

Mechanisms of these viral infections and immunopathology

Rashes (exanthems and enanthems), their distribution and changing pathology with time

Clinical and laboratory diagnosis of infection in the pregnant female, the neonate and child

Prognosis of these infections

The consequences of immunodeficiency and autoimmunity, and the effects on the immunocompromised host

Passive and active vaccination, antiviral and therapy

Learning Activities

Distance learning with tutorial support

Learning materials delivered by VLE (Blackboard) to include directed reading, online lectures, online assessments with feedback, online discussions

Notes

There will be particular emphasis on developing independent learning skills and IT capability to access and extract relevant scientific information via Blackboard and databases available from LJMU. Online literature searches and evaluation of relevant scientific and popular literature will be key aspects, together with development of communication skills. An interactive reading list, including e-texts, will be made available via VLE.

This module will be offered as a single module CPD.

ADDITIONAL INFORMATION REQUIRED FOR SINGLE-MODULE CPD AWARDS (in lieu of a Programme Specification)

No specific benchmarks are available for this module, but the learning outcomes at least meet, if not exceed, those stipulated in the relevant qualification descriptors for a higher education qualification at level 7 (Master's degree characteristics) as defined by QAA, Sept 2015. The module has also been informed by the benchmark statement for Biomedical Science June 2015.

The module is delivered by Blackboard, which is supported by a Virology Tutor. Study mode is part-time distance learning and lasts for 1 semester. Attendance is only required for the module examination. Intake is every January.

The criteria for admission to the module require that candidates meet the criteria for admission to the MSc Virology programme (31066).

The final award is Continuing Professional Development in Viral Infections of Pregnancy and Childhood, 20 credits at Level 7.

The students have access to a module Blackboard site and the University's other range of electronic support such as access to the electronic library facilities. The module content is regularly updated on the Blackboard site including contemporary reading lists and links to journal articles. Students have access to the community site for Virology. All students are assigned a personal Virology Tutor for support and guidance through the module, this maybe via email or online tutorials. There is also access to the module leader through phone contact and email. Module and CPD guides are also provided, which provide a range of information.

The programme is assessed and run in line with the Academic Framework <http://www.ljmu.ac.uk/eaqs/121984.htm>

The module is accredited by The Institute for Biomedical Science (Sept 2015- Aug 2020). The module forms part of the MSc Virology programme (30966) which was reviewed in June 2016.

The methods for improving the quality and standards of learning are as follows:

- Annual monitoring Review;
- Liaison and feedback from the students;
- Reports from External Examiner;
- Programme team ensuring the module reflects the values of the current teaching and learning strategy;
- Module leader and/or Specialist Virology author updating knowledge and skills to ensure these remain current and relevant.

The module is included in the programme specification for the MSc Virology programme (31066). The module is aligned with the same MSc Virology module for annual monitoring and external examining purposes.