

Liverpool John Moores University

Title: VIRAL INFECTIONS OF PREGNANCY AND CHILDHOOD
Status: Definitive
Code: 7003VMBMOL (113122)
Version Start Date: 01-08-2015

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

Team	Leader
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Academic Level: FHEQ7 **Credit Value:** 20 **Total Delivered Hours:** 43

Total Learning Hours: 200 **Private Study:** 157

Delivery Options

Course typically offered: Semester 2

Component	Contact Hours
Tutorial	40

Grading Basis: 40 %

Assessment Details

Category	Short Description	Description	Weighting (%)	Exam Duration
Exam	Exam	Written examination	60	3
Essay	AS1	1 written assignment worth 40% of module mark	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.