Liverpool John Moores University

Title:	HERPES VIRUSES
Status:	Definitive
Code:	7004NMBMOL (101579)
Version Start Date:	01-08-2011
Owning School/Faculty: Teaching School/Faculty:	Pharmacy & Biomolecular Sciences Pharmacy & Biomolecular Sciences

Team	emplid	Leader
Victoria Miller		Y
Helen Smalley		

Academic Level:	FHEQ7	Credit Value:	12.00	Total Delivered Hours:	7.00
Total Learning Hours:	120	Private Study:	113		

Delivery Options

Course typically offered: Runs Twice - S1 & S2

Component	Contact Hours
Tutorial	4.000

Grading Basis: 40 %

Assessment Details

Category	Short	Description	Weighting	Exam
	Description		(%)	Duration
Exam	AS1	Theory paper (3 hours) comprising 8 short answer-type and any TWO from FOUR essays. A minimum mark of 40% is required to pass the examination.	30.0	3.00
Essay	AS2	One assignment (full guidance notes provided). A minimum mark of 40% is required to pass the assignment.	70.0	

Aims

To familiarise students with (a) the biology and importance of herpesviruses as causative agents of disease, (b) techniques for their laboratory diagnosis and (c)

how disease may be prevented and treated.

Learning Outcomes

After completing the module the student should be able to:

- 1 review the biology of "fast" and "slow" herpesviruses
- 2 assess the importance of the major and less common diseases associated with different herpesviruses
- 3 appreciate the current techniques used for the laboratory diagnosis of herpes infections
- 4 understand the strategies employed for prevention and treatment

Learning Outcomes of Assessments

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

EXAM	1	2	3	4
ESSAY	1	2	3	4

Outline Syllabus

Structure and Classification of herpesviruses, their chemical composition and replication

Concepts of primary infection, latency, reactivation and reinfection Modes of transmission of HSV- I and HSV-2, and their disease associations HSV syndromes (genital and non-genital effects, ocular and CNS effects. Neonatal infections, disseminated infections and illness in the immunocompromised host) VZV infections (primary disease, complications and recurrent illness. VZV in pregnancy and in the immunocompromised host)

Diagnosis of herpesvirus infections (serology, culture and novel methods) Treatment and prevention of herpesvirus infections (Immunoglobulins, vaccines and antivirals)

Simian and other important "fast" herpesviruses.

Outline of contents: (including Inoue-Melnick virus)

CMV infections (Transmission and primary infections. Latency, reactivation and reaction. Illness in the immunocompromised host)

EBV infectious (Transmission and primary infections. Latency and reactivation. Illness in the immunocompromised host. Association with malignant disease) HHV-6 infections (Transmission and primary infections. Latency possible

association of reactivation with illness. Illness in the immunocompromised host) Novel herpes viruses (including Herpes B virus) and possible disease associations

Diagnosis of herpesvirus infections (serology, culture and novel methods)

Treatment and prevention of herpesvirus infections (immunoglobulins, vaccines and antivirals)

Summary - the ubiquitous nature of herpesviruses, and their importance as pathogens of man and animals

Learning Activities

Primary mode by distance learning with tutorial support and assignment feedback

References

Course Material	Book
Author	Hudnall DS, Chen T and Tyring SK
Publishing Year	2004
Title	Species identification of all eight human herpesviruses with
	single nested PCR assay.
Subtitle	Journal of Virological Methods
Edition	volume 116 pages 19-26
Publisher	
ISBN	

Course Material	Book
Author	Wagner M, Ruzsics Z and Ulrich H
Publishing Year	2002
Title	Herpesviruse genetics has come of age.
Subtitle	Trend in Microbiology
Edition	Volume 10 pages 318 - 324
Publisher	
ISBN	

Notes

Students must achieve an aggregate mark for the examination and coursework of at least 40% with at least a 40% pass in BOTH coursework and examination components.

Only TWO indicative references are provided here. Selected up to date reviews and other scientific papers are required to complete key distance learning stages and assignments. Reference llists are on Blackboard. Students are expected to complete their own detailed literature search to support the reference material provided. A critical analysis of the scientific literature is always required.