



## Medical Virology (MLT-326) 1437-1438H

### A- COURSE INFORMATION:

Course Code	Course Title	Credit Units			Study Level	Pre-requisites
		Total	Theory	Practical		
MLT 326	Medical Virology	3	2	1	6th	MLT 222
Course Coordinator		Extension		Email Address		
Dr. Hatim Makhdoom				hmakdoom@taibahu.edu.sa		

### B- COURSE DESCRIPTION:

This course is designed to study different types of virus with medical importance to human. It focuses on their structures, general properties, cultivation, disease causation, and spread of virus. Course emphasizes on the diagnosis particularly the latest innovation in diagnostic of virology.

### C- COURSE OBJECTIVES:

The Medical Virology course reflects the function to give students a broad understanding of the roles of virus in human infectious diseases, The course covers the main principles related to the interaction of mainly human viruses with host cells and molecular events during viral replication. General topics include chemical and physical properties of viruses, virus classification, cultivation of viruses, including the virus transmission, disease causation, laboratory diagnosis and prevention and control of infection.

### D- THEORY TOPICS:

Week	Theory Topic	Hours
1	Introduction to viruses and general properties of viruses	2
2	Viral replication cycle and Virus Genetics	2
3	Virus cell culture and its effect	2
4	Serological and Molecular Virus diagnosis - Virus and host immune response	2
5	Herpesviruses	2
6	Orthomyxoviruses - Rotavirus and other gastrointestinal viruses	2
7	Paramyxoviruses and other respiratory viruses	2
8	Lentiviruses (HIV and HTLV)	2
9	Hepatitis Viruses	2



10	Human Papilloma virus (HPV)	2
11	Hemorrhagic viruses	2
12	Emerging viruses	2
13	Oncogenesis Viruses	2
14	Slow viruses and Prion diseases.	2
15	Revision	2

**F- ASSESSMENT TASKS:**

#	Type of assessment task	Week	Total Grades
1	Assignment submission	Week 10	5%
2	Midterm examination (written)	Week 8	15%
3	Continuous assessment	Weeks 1-14	10%
4	Final practical exam	Week 16	30%
5	Final written examination	Week 17-18	40%

**G- LEARNING RESOURCES:**

**1- Required textbook:**

1. Virology : principles and applications / John Carter and Venetia Saunders. ISBN 978-0-470-02386-0 ( last version)
2. Essentials of Diagnostic Virology, by Gregory A. Storch MD (Jan 15, 2000)
3. Medical Virology, Fourth Edition By D. E. White, Frank J. Fenner

**Notes:**

- Assignments topics and requirements shall be announced by the end of Week-1, the deadline for submission is 12pm Thursday of Week-10 (each semester).
- Assignments and written assessment tasks must be verified against plagiarism, the maximum acceptable percentage is determined by the department (according to each level).
- Continuous assessment methods may include quizzes, internet searches, home-works, exercises, class activity, scratch cards, presentations, group work, etc.
- Practical exams may contain hands-on experiments, laboratory work, simulations, or demonstrations.
- Written exams will include multiple-choice questions (MCQ), short essay questions, and long essay questions.