	Course Syllabus
Course Title: Virology	**Course code:** 240314
Course Level: Third year	**Course prerequisite (s) and/or corequisite (s):** 240314
Lecture Time: **Section 1: 12:10-13:00** Sun, Tue, Thurs	**Credit hours: 3**

Academic Staff Specifics			
Name	**Rank**	**Office Number and Location**	**E-mail Address**
Dr. Nabil A.S. NIMER	**Assisstant Professor**	**1114S**	nabil_nimer@philadelphia.edu.jo

Course module description:

The course covers the fundamental principles related to the interaction mainly animal viruses with host cells. General topics include chemical and physical properties of viruses, virus classification, cultivation and assay of viruses, molecular events during viral replication and morphogenesis. Persistent infections and viruses as the cause of disease and neoplasma.

Course module objectives and knowledge outcome:
At the end of this module, student will be able to:
* Differentiate the nature of viruses as particles or structures
* The special techniques by which we can replicate viruses
* Laboratory diagnosis of viruses using different techniques (such as: Molecular, immunological etc..)
* Classification of viruses.
* Understanding the main and new emerging threats of viral diseases eg. HIV , influenza
* How to combat viral infections.

Teaching methods:

The 45 hours in total will be mainly lectures with few tutorials and including two one hour exams.

<u>**Learning outcomes:**</u>

- **Cognitive skills (thinking and analysis).**

  The capacity to identify different perspectives, theories and models potentially relevant to different subject matter and to appraise their strengths and weaknesses.

  The capacity to be aware of the limitations of existing knowledge and understanding and to recognize the relevance of developing new approaches to situations and problems.

  Learning logical thinking through taking the important ideas, facts and conclusions involved in a problem and arranging them in a chains like progression that takes on a meaning in and of itself.

- **Communication skills**

  Speak with more confidence and listen carefully to build rapport.

  Students will be encouraged to express themselves more effectively

<u>**Assessment instruments**</u>

Allocation of Marks	
Assessment Instruments	**Mark**
First examination	**15**
Second examination	**15**
Three ten minute short exams	**10**
Final examination: 50 marks	**50**
Total	**100**

<u>**Course/ module components**</u>

week	Basic and support material to be covered

(1)	Introduction to virology
(2)	General properties and classification of viruses
(3)	General features of viral replication and genetics
(4)	How viruses cause disease
(5)	Viruses and cancer
(6)	**First Exam**
(7)	Resistant to infection
(8)	The laboratory diagnosis of viral infections
(9)	Safety precautions
(10)	Hepatitis viruses
(11)	**Second examination**
(12)	Retroviruses and AIDS Orthomyxovirues and influenza
(13)	The herpes viruses
(14)	Prion diseases
(15)	Antiviral chemotherapy
(16) **Final Examination**	Control of viral disease by immunization

Expected workload:

On average students need to spend 3 hours of study and preparation for each 50-minute lecture/tutorial.

Attendance policy:
Absence from lectures and/or tutorials shall not exceed 15%. Students who exceed the 15% limit without a medical or emergency excuse acceptable to and approved by the Dean of the faculty of science shall not be allowed to take the final examination and shall receive a mark of zero for the course. If the excuse is approved by the Dean, the student shall be considered to have withdrawn from the course.

Module references
Title: Human Virology , Second Edition 2002
Author(s)/Editor(s): Collier, L and Oxford , J
Publisher: Oxford University Press
ISBN: 0 19 262820 8
Students will be expected to give the same attention to these references =
(as given to the Module textbook(s

1. **Introduction to Modern Virology , Dimmok N.J**. *etal*
Blackwell Science Fifth edition, 2001
2. **Microbiology, Prescott L.M.** *etal*
McGraw-Hill Fifth Edition 2002

In addition to the above, the students will be provided with handouts by .the lecturer