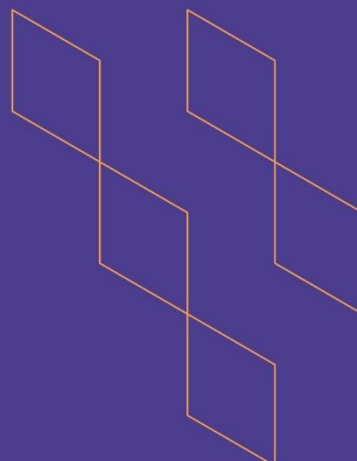




T-104  
2022

## Course Specification



Course Title: **Virology**

Course Code: **MICR232**

Program: **Bachelor of science in Biology**

Department: **Biology Department**

College: **College of Science**

Institution: **Jazan University**

Version: **T-104**

Last Revision Date: *Pick Revision Date.*



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## A. General information about the course:

### Course Identification

1. Credit hours: 2

#### 2. Course type

a. University ☐ College ☐ Department ☒ Track ☐ Others ☐

b. Required ☒ Elective ☐

3. Level/year at which this course is offered:

#### 4. Course general Description

This course explains the nature of viruses and their relationships with the other living organisms, and to study their characteristics and their medical and economical importance. General characteristics of viruses. Virus structure and shapes, viroids, prions, satellites, multiplication of viruses, virus. Taxonomy and cultivation, viral pathogenesis, patterns of some viral diseases, cell transformation by viruses, interferon, antiviral agents, immunization and vaccination.

5. Pre-requirements for this course (if any): BIOL101 General Biology

6. Co- requirements for this course (if any): None

#### 7. Course Main Objective(s):

At the end of the course students will be able to:

This course is designed to provide students with the following concepts:

1. To study General characteristics of viruses.
2. To study the Virus structure and shapes, viroids, prions, satellites.
3. To understand the multiplication of viruses.
4. To study Taxonomy and cultivation, viral pathogenesis, patterns of some viral disease transformation by viruses, interferon, antiviral agents, immunization and vaccination.

### 1. Teaching mode (mark all that apply)

No	Mode of Instruction	Contact Hours	Percentage
1.	Traditional classroom	10	76.9%
2.	E-learning	1	7.7%
3.	Hybrid <ul style="list-style-type: none"> <li>Traditional classroom</li> <li>E-learning</li> </ul>	1	7.7%
4.	Distance learning	1	7.7%

### 2. Contact Hours (based on the academic semester)

No	Activity	Contact Hours
1.	Lectures	11



2.	Laboratory/Studio	22
3.	Field	-
4.	Tutorial	-
5.	Others (Self-study)	2
Total		35

## B. Course Learning Outcomes (CLOs), Teaching Strategies and Assessment Methods

Code	Course Learning Outcomes	Code of CLOs aligned with program	Teaching Strategies	Assessment Methods
1.0	Knowledge and understanding			
1.1	List all characteristics importance features steps related to Virology.	K1.3	Lectures	Quizzes, Short Answer Question (SAQ), MCQs
1.2	Differentiate (compare) between different mechanisms, functions, practices and aspects related to Virology.	K2.1	Lectures	Direct questions
1.3	Draw all systems organs cells and its contents diagrams and figures of Virology	K2.3	Lectures, Lab work	Long or short answer questions, homework
2.0	Skills			
2.1	Examine theoretically or practically the slides photos, diagrams or statements of Virology.	S1.3	Lectures	Long or short answer questions
2.2	Predict the results of some Virology problems and experiments.	S2.1	Lectures	Long or short answer questions
2.3	Propose solutions for different complex virology approaches.	S3.2	Lectures, Lab work	Long or short answer questions
3.0	Values, autonomy, and responsibility			



Code	Course Learning Outcomes	Code of CLOs aligned with program	Teaching Strategies	Assessment Methods
3.1	<b>Integrate prior knowledge of virology technology along with new knowledge in the profession for the sake of self-continuing professional development</b>	V1.2	Lab work	Lab work assessment, Assignments

## C. Course Content

No	List of Topics	Contact Hours
1.	<b>Viruses, general properties; disease and host response</b>	1
2.	<b>Virus replication &amp; Plant Viruses</b>	1
3.	<b>Influenza &amp; Other respiratory tract infections</b>	1
4.	<b>Neurological diseases due to viruses - Enterovirus infections</b>	1
5.	<b>Viral gastroenteritis &amp; Arthropod-borne virus infections</b>	1
6.	<b>Rabies, non-arthropod-borne haemorrhagic fevers</b>	1
7.	<b>Herpesvirus diseases &amp; Childhood fevers</b>	1
8.	<b>Poxvirus diseases</b>	1
9.	<b>Viral hepatitis &amp; Warts</b>	1
10.	<b>Antiviral therapy &amp;</b>	1
11.	<b>Retroviruses</b>	1
12.	<b>Plant Viruses</b>	Self Study
<b>Total</b>		<b>11</b>

## D. Students Assessment Activities

No	Assessment Activities *	Assessment timing (in week no)	Percentage of Total Assessment Score
1.	Lecture Quizzes 1	3	5%
2.	Mid-term Theory exam	5	10%
3.	Practical Quiz exam	6	5%
4.	Homework assignment	8	5%
5.	Practical assignment	9	5%
6.	Final practical exam	11	20%
7.	Final Exam	12	50

\*Assessment Activities (i.e., Written test, oral test, oral presentation, group project, essay, etc.)



## E. Learning Resources and Facilities

### 1. References and Learning Resources

Essential References	- Carter J., Venetia (2005) Virology. John and John Wiley & Sons, London.
Supportive References	• - Alan, J. C. (2005) Principles of Molecular Virology. Elsevier, Amsterdam.
Electronic Materials	• E-Journals in Virology.
Other Learning Materials	-----

### 2. Required Facilities and equipment

Items	Resources
facilities (Classrooms, laboratories, exhibition rooms, simulation rooms, etc.)	Traditional classrooms and E-learning
Technology equipment (projector, smart board, software)	(projector, smart board, software)
Other equipment (depending on the nature of the specialty)	NA

## F. Assessment of Course Quality

Assessment Areas/Issues	Assessor	Assessment Methods
Effectiveness of teaching	Students Course Coordinator	Direct (Questionnaire)
Effectiveness of students assessment	Peer Reviewer	Direct (Cross Check marking)
Quality of learning resources	Students Course Coordinator Quality Committee	Indirect
The extent to which CLOs have been achieved	Course Coordinator Quality Committee	Indirect
Other	----	----

**Assessor** (Students, Faculty, Program Leaders, Peer Reviewer, Others (specify))

**Assessment Methods** (Direct, Indirect)

## G. Specification Approval Data

COUNCIL /COMMITTEE	BIOLOGY DEPARTMENT BOARD
REFERENCE NO.	BIO2214
DATE	20/9/2022AD