



Beni-Suef University
Faculty of Veterinary Medicine
Department of animal Medicine

Program Specification for PhD Degree
2017-2018

A-Basic information:

- 1- **Course title:** *PhD VSC. Specialty:* Infectious Diseases
- 2- **Program type:** *Single*
- 3- **Department offering program:** Department of animal Medicine
- 4- **Academic year:** 2017-2018
- 5- **Approval date of Department Council:**
- 6- **Approval date of Faculty Council:**
- 7- **External evaluator:**

B-Professional information:

1- Overall aims of the program:

- 1- Apply the analytical and evaluating approaches to the knowledge of infectious diseases diagnosis, prevention and control and other related sciences.
- 2- Master the principles of scientific research.
- 3- Master wide range of professional skills and techniques in diagnosis of infectious diseases.
- 4- Integrate the acquired knowledge about infectious diseases with the other related sciences and develop the relations in between.
- 5- Identify the practical problems facing animal industry and find solutions.
- 6- Make decisions depending on the available data in different professional and practical contexts.
- 7- Perform self-development and continuous learning and transfer the acquired knowledge and experience to others.
- 8- Improve the skills of writing dissertations and scientific papers.

2- Intended learning outcomes of course (ILOs):

a- Knowledge and understanding:

By the end of this PhD program the graduate should be able to:

- a.1. Acquire the recent theories in the field of infectious diseases and related sciences.
- a.2. Identify advanced scientific research principles, regulations, ethics and its different tools.
- a.3. Identify the legal and moral rules in different infectious diseases diagnostic, preventive and control practices.
- a.4. Understand the principles of development of livestock production.
- a.5. Be aware of his role in community development and environment protection.

b- Intellectual capacity:

By the end of this PhD program the graduate should be able to:

- b.1. Analyze and evaluate knowledge related to infectious diseases and Interpret the available data to solve the related problems.
- b.2. Solve problems affecting domestic animals using the available data.
- b.3. Conduct research studies that add new knowledge to the infectious diseases.
- b.4. Write scientific papers.
- b.5. Identify the risk factors related to diagnosis, prevention and control of infectious diseases.
- b.6. Take decisions using the available information in different practices related to infectious diseases

c- Professional and practical skills:

By the end of this PhD program the graduate should be able to:

- c.1. Perform different conventional and advanced techniques in the field of diagnosis of infectious diseases.
- c.2. Write and evaluate reports related to diagnosis of infectious diseases.
- c.3. Assess and improve different available tools and methods regarding diagnosis, prevention and control of infectious diseases.
- c.4. Properly use the suitable technologies to serve professional practices.
- c.5. Enhance the performance of others through proper planning.

d- General and transferable skills:

On successful completion of this program the graduate should be able to:

- d.1. Use the information technologies for development of professional abilities.
- d.2. Perform self-development and continuous learning and transfer the acquired knowledge and experience to others.
- d.3. Utilize the resources to obtain knowledge and information.
- d.4. Learn how to work effectively as part of a team and effectively lead teamwork.
- d.5. Manage scientific meetings and discussions.

3- Academic standers

* The faculty mission, vision and strategic objective are confirmed to the academic standard. The learning outcomes are in line with the department and the faculty mission.

* Postgraduates NARS (March 2009) Master degree chapter issued by national authority for quality assurance and accreditation of education (NAQAAE) and Veterinary medicine post graduate academic standards (ARS) for the faculty of veterinary medicine, Beni-Suef University, Beni-Suef, Egypt are selected to confirm the appropriateness of the academic standards .
ARS (National Academic Reference Standards) prepared by NAQAAE.

4- Curriculum Structure and Contents

A- Program duration: At least three academic years from the approval of registration by the Faculty Council and maximum five years. The faculty council has the right to give the applicant another period not exceed two years according to the supervisor request. The first year for preliminary courses study, while the second and third years for researches and preparation of the PhD Thesis.

B- Program structure: 3-5 preliminary courses **Hours/ week:**Theoretical Practical Total **C- Program courses**

Code	Course title	Hours /week		Academic year	Teaching duration
		Theoretical	Practical		
Vary according to the selected course	Selected (3-5) courses depending on the thesis title from the various Faculty PhD courses other than specialty of the Master.	6-8	6-8	Preliminary year	36 weeks

D- Courses contents

See courses specification

5- Program Admission Requirements

* According to the Faculty of Veterinary Medicine, Beni-Suef University , Post Graduate Programs, applicants should have a master degree in the specialization subject he will register in one of the Egyptian Universities or an equivalent degree from any approved university or another recognized scientific institute.

* According to Beni-Suef University requirements, all applicants for postgraduate studies should fulfill preliminary courses on the following subjects:

1-English language (Toefl or equivalent degree)

* Admission to the program is open during March and September annually.

*The faculty council has the right to suspend the student enrolment for a certain period if he has acceptable excuse preventing him from continuing his study or research.

6. Regulations for Progression and Program Completion

After finishing the preliminary courses, the graduate student will be eligible to sit for the examination according to the following rules:

No. of course teaching hours/ week	Allowed written exam time	Degree	
		Theoretical	Practical and oral exam
≥ 3 hours	3 hours	50	50
≤ 3 hours	2 hours	25	25

-The faculty council has the right to deprive the applicant from entering the exams if his attendance of the courses is less than 75%.

-Failure or depriving from entering one or more course did not requires reexamination of successful passed courses.

-The applicant should submit a seminar within 2 years after registration about his research and specialization subject filed that accepted by a committee of professors and assistant professors (3 in number).

-the applicant should submit the thesis that accepted by the judging committee in an open discussion and the following polices should be met:

- pass all preliminary curriculums successfully.
- acceptance of the seminar presented by the applicant.

-The applicant should publish at least two scientific papers from the thesis in local or international journals

Qualification grades:

Excellent	≥ 90
Very good	≥80
Good	≥70
Pass	≥60
Failed	45 to less than 60 weak
	Less than 45 Very weak

After passing, the graduate starts research for Ph.D. Thesis at the beginning of the second year. The candidate will receive his degree after evaluating and approving the thesis by a committee according to University regulations.

7-Graduate student assessment

A: Assessment Tools

According the Faculty of Veterinary Medicine, Beni-Suef University, Post Graduate, students should be assessed at the end of preliminary year and the thesis should be evaluated and approved by a committee after at least three years from registration date according to University regulations.

Preliminary year

Assessments methods for each course	Practical exam	Oral exam	Written exam
Time of Assessments	during December	during December	during December
Marks	25	25	50

Ph.D. Thesis:

The Ph.D. students should prepare a thesis in infectious diseases. The department and the ethical committees must approve the protocol of the research. The thesis includes a review part with a practical part. The thesis is supervised by two or more staff members and may include other specialties according to the nature of the research. The thesis should be evaluated and approved by a committee according to University regulations.

B- Matrix alignment of the measured ILOs

Assessments methods	Matrix alignment of the measured ILOs			
	K&U (a)	I.S (b)	P&P. S (c)	G&T. S (d)
Written Exam	a1-a2-a3-a4-a5	b1-b2-b3-b4- b6- b7		
Practical Exam		b1-b2-b3-b4- b6	c1-c2-c3-c4	
Oral Exam	a1-a2-a3-a4-a5	b1-b2-b3-b4- b6-	c1-c2-c3-c4	d1-d2-d3

8- Evaluation of Program Intended Learning Outcomes

Evaluator	Tool	Sample
1. Post graduate students	Questionnaire at the end of the program	All the PG students
4. External evaluators	Review program and courses Attending the final exam	Once before implementation annual report
5. College Quality Assurance Committee	Annual program reviewer	

Program aims – ILOS Matrix for the PhD program

مصفوفة اهداف البرنامج مع مخرجات التعلم المستهدفة

Program ILOS		Program aims							
		1. Apply the analytical and evaluating approaches to the knowledge of infectious diseases diagnosis, prevention and control	2. Master the principles of scientific research..	3. Master wide range of professional skills and techniques in diagnosis of infectious diseases	4. Integrate the acquired knowledge about infectious diseases with the other related sciences and develop the relations in between.	5. Identify the practical problems facing animal industry and find solutions.	6. Make decisions depending on the available data in different professional and practical contexts.	7. Perform self-development and continuous learning and transfer the acquired knowledge and experience to others..	8. Improve the skills of writing dissertations and scientific papers
Knowledge and understanding	a.1. Acquire the recent theories in the field of infectious diseases and related sciences.		√		√				
	a.2. Identify advanced scientific research principles, regulations, ethics and its different tools.		√						
	a.3. Identify the legal and moral rules in different infectious diseases diagnostic, preventive and control practices..	√	√		√				
	a.4. Understand the principles of development of	√	√						

Program ILOs		Program aims							
	livestock production.								
	a.5. Be aware of his role in community development and environment protection.		√		√			√	
Intellectual skills	b.1. Analyze and evaluate knowledge related to infectious diseases and Interpret the available data to solve the related problems	√		√		√			√
	b.2. Solve problems affecting domestic animals using the available data.						√		
	b.3. Conduct research studies that add new knowledge to the infectious diseases						√	√	
	b.4. Write scientific papers.								√
	b.5. Identify the risk factors related to diagnosis, prevention and control of infectious diseases.			√		√	√		
	b.6. Take decisions using the available						√		√

Program ILOs		Program aims							
	information in different practices related to infectious diseases								
Practical and professional skills	c.1. Perform different conventional and advanced techniques in the field of diagnosis of infectious diseases.	√	√						
	c.2. Write and evaluate reports related to diagnosis of infectious diseases.					√	√	√	
	c.3. Assess and improve different available tools and methods regarding diagnosis, prevention and control of infectious diseases.	√			√				
	c.4. Properly use the suitable technologies to serve professional practices	√		√	√				
	c.5. Enhance the performance of others through proper planning		√				√		
General and transferable	d.1. Use the information technologies for development of professional abilities.				√		√		

Program ILOs		Program aims							
d.2. Perform self-development and continuous learning and transfer the acquired knowledge and experience to others.				√			√		
d.3. d.3. Utilize the resources to obtain knowledge and information		√		√					
d.4. Learn how to work effectively as part of a team and effectively lead teamwork			√			√		√	
d.5. d.5. Manage scientific meetings and discussions						√	√	√	

PhD Program Specification Matrix
(Program Courses with ILOS)

83,87,88,89, 91, 92,99,102, 131,132,133,134,135,136,137, 140,141,142,143,144,145,146,147, 212,213,214

Program ILOs	Courses	
Knowledge and understanding	a1	Ph-140, Ph-141, Ph-142, Ph-144, + thesis
	a2	Ph-142, Ph-143, Ph-131, Ph-136, Ph-131+ thesis
	a3	Ph-131, Ph-141, Ph-144, Ph-146, Ph-135, + thesis
	a4	Ph-140, Ph-141, Ph-142, Ph-143, Ph-144, Ph-145, Ph-146, Ph-147, + thesis
	a5	Ph-140, Ph-131, Ph-132, Ph-134, Ph-145, Ph-136, + thesis
Intellectual skills	b1	Ph-140, Ph-141, Ph-132, Ph-133, + thesis
	b2	Ph-102, Ph-91, Ph-142, Ph-133, + thesis
	b3	Ph-140, Ph-144, Ph-147, Ph-134, + thesis
	b4	Ph-140, Ph-131, Ph-132, Ph-83, Ph-88, + thesis
	b5	Ph-140, Ph-141, Ph-142, Ph-143, Ph-144, + thesis
	b6	Ph-131, Ph-141, Ph-132, Ph-133, Ph-144, + thesis
Professional and practical skills	c1	Ph-83, Ph-99, Ph-92, Ph-102, Ph-202, + thesis
	c2	Ph-140, Ph-141, Ph-142, Ph-143, Ph-212, + thesis
	c3	Ph-140, Ph-131, Ph-92, Ph-214, Ph-145, + thesis
	c4	Ph-99, Ph-102, Ph-132, Ph-133, Ph-213+ thesis
	c5	Ph-140, Ph-141, Ph-137, Ph-91, Ph-214, + thesis
General and transferable skills	d1	Ph-140, Ph-89, Ph-99, Ph-102, Ph-212, + thesis
	d2	Ph-87, Ph-88, Ph-89, Ph-102, + thesis
	d3	Ph-140, Ph-141, Ph-142, Ph-143, Ph-144, Ph-145, Ph-146, Ph-147, + thesis
	d4	Ph-140, Ph-131, Ph-132, Ph-133, Ph-134, Ph-135, Ph-136, + thesis
	d5	Ph-140, Ph-141, Ph-132, Ph-143, Ph-144, Ph-145, Ph-146, Ph-147, + thesis

Programme coordinator:	
Name Sherin Rouby	
Signature	Date
Head of the Department:	
Name: Hosein Abd Al Aal	
Signature	Date



Course specification

1-Basic information

Course Code:	<i>PhD</i> -140
Course title:	Infectious diseases of cattle
Program title:	<i>PhD</i>
Contact hours/ week	4 hours per week (2 theoretical and 2 practical)
Approval Date	

2-Professional information

Overall aims of course:

This course aims to:

Recognize the theories, principles and basics of infectious diseases and other related sciences, employ the acquired knowledge of infectious diseases of cattle together with other related topics, master different professional skills and techniques in diagnosis, prevention and control of infectious diseases of cattle and deal with field problems of cattle infectious diseases. Also, to support the basic knowledge about etiology, epizootiology, clinical signs, and diagnosis and control measures of infectious diseases of cattle and provide opportunities to understand the molecular and cellular mechanisms of disease process and gain skills and ability to deal with field differential diagnosis, treatment and control of infectious diseases.

3- Intended learning outcomes of course (ILOs)

A-Knowledge and understanding:

By the end of this course the student should be able to:

- a1- describe advanced research techniques used in the field of infectious diseases.
- a2- identify the basic knowledge about etiological agents and pathogenesis of different infectious diseases of cattle.
- a3- list the major field problems concerned with infectious



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diseases of cattle.

a4- identify the important aspects regarding the diagnosis of different infectious diseases of cattle.

a5- mention the basic knowledge about the treatment and control measures of different infectious diseases of cattle.

B- Intellectual skills

By the end of this course the student should be able to:

b1- analyze the field problems to reach a preliminary diagnosis.

b2- suggest the suitable solutions during outbreaks and interpret the available data.

b3- use the basic information for analysis of epidemics of cattle and interpret the available data to achieve diagnosis.

b4 -enhance the ability to differentiate between infectious diseases of cattle.

C-Professional and practical skills

By the end of this course the student should be able to:

c1- perform the different methods and techniques of clinical examination.

c2- perform the different sampling methods.

c3- acquire the experience of planning of a control program.

c4- plan and apply the different methods of control programs.

c5-use epidemiological information of the early warning system for early diagnosis of infectious diseases.

D-General and transferable skills

By the end of studying the course, the student should be able to:

d1-enhance the skills of problem definition and how to deal with it.

d2-enhance skills of epizootiological data analysis, and clinical and laboratory examinations.

d3- enhance the experience of taking history in infected farms and Increase the ability of organizing control programs.

d4- collect the Data of diseased animals in an informative and suitable manner.

Course specification

4-Topics and contents

Course	Topic	Hours	Lectures	Practical
Infectious diseases of cattle	Principles of epidemiology Natural history of disease Iceberg phenomena Exotic diseases Transboundary diseases Principles of disease control.	24	12	12
	Problem of calf enteritis Problem of calf pneumonia	20	10	10
	Infectious diseases of fattening steers	20	10	10
	Infectious diseases of dairy cattle	20	10	10
	Sudden death syndrome	20	10	10
	Neurological disorders	20	10	10
	Prescribed tests	20	10	10
	Total		144	72

5-Teaching and learning methods

5.1- Lectures and oral presentations

5.2- Clinical sections.

5.3- The use of multimedia aids e.g slide projector, data show, video tapes.

6-Student assessment

6.1. Assessments methods:

Method	Matrix alignment of the measured ILOs/ Assessments methods			
	K&U	I.S	P&P.S	G.S
Final Exam	a1- a2- a3-a4-a5	b2- b3-b4		
Practical Exam		b1	c-4	d1
Oral Exam	a1- a2- a3- a4	b1- b2- b3-b4		

6.2. Assessment schedules/semester:



Course specification

Method	Week(s)
Writing exam	During December
Practical exam	During December
Oral exam	During December

6.3. Weight of assessments:

Assessment	Weight of assessment
Writing exam	50%
Practical exam	25%
Oral exam	25%
Total	100%

7 List of references

7.1. Notes and books

- Infectious diseases of domestic animals (2004/1588) by H.I.Hosein (2018) 4th Ed.

7.2. Essential books:

- Veterinary medicine 7th ed (A text book of the diseases of cattle, sheep, pigs, goats and horses) 1983.
- Veterinary clinical diagnosis 3th Ed. 1984
- Cattle diseases 1984
- Diseases of sheep 2nd Ed. 1982
- A color atlas of small animal dermatology 1985

7.3. Recommended texts

- The Merck veterinary manual 9th 2005

7.4. Journals, Websitesetc

Journals:

Journal of Veterinary Science
Research in Veterinary Science
Preventive Veterinary Medicine
Journal of Veterinary Diagnostic Investigation

Websites:

2-www.OIE
3-www.FAO



Beni-Suef University
Faculty of Veterinary Medicine



Course specification

Course Coordinators

Head of Department

Dr. Hosein Abd Al Aal



Course specification

Topic	Week	Intended learning outcomes of course (ILOs)			
		K&U (a)	I.S (b)	P.P.S (c)	G.T.S (d)
<ul style="list-style-type: none"> • Principles of epidemiology • Natural history of disease • Iceberg phenomena • Exootic diseases • Transboundry diseases • Principles of disease control. 	1-6	a2, a3			
<ul style="list-style-type: none"> • epidemiology of diseases of newly born animals • Problem of calf Enteritis • Problem of calf pneumonia 	7-11	a1- a2- a3- a4	b1-b2- b3-b4		d1- d2 d3
<ul style="list-style-type: none"> • Infectious diseases of fattening steers 	12-16	a1- a2- a3- a4	b1-b2- b3-b4		
<ul style="list-style-type: none"> • Infectious diseases of dairy cattle 	17-21	a1- a2- a3	b1-b2- b3-b4	c2, c4	d3, d4
<ul style="list-style-type: none"> • Sudden death syndrome 	22-26	a1- a2- a3- a4	b3-b4	c2	
<ul style="list-style-type: none"> • Neurological disorders 	27-31	a1- a2	b1-b2- b3		
<ul style="list-style-type: none"> • Prescribed tests 	32-36	a1- a2	b1-b2- b3	c2, c4	



Course specification

1-Basic information

Course Code:	<i>PhD</i> -141
Course title:	Infectious diseases of sheep and goats
Program title:	<i>PhD</i>
Contact hours/ week	4 hours per week (2 theoretical and 2 practical)
Approval Date	

2-Professional information

Overall aims of course:

This course aims to:

Recognize all theories, principles and basics of area of learning of infectious diseases of sheep and goats as well as other related sciences, employ the acquired knowledge of infectious diseases of sheep and goats together with other related topics and master different professional skills and techniques in diagnosis, prevention and control of infectious diseases of sheep and goats. Also, to support the basic knowledge about etiology, epizootiology, clinical sings, and diagnosis and control measures of infectious diseases of infectious diseases of sheep and goats, demonstrate an understanding of basic control management procedures and protocols including isolation, quarantine and disinfection and provide opportunities to understand the molecular and cellular mechanisms of disease process.

3- Intended learning outcomes of course (ILOs)

A-Knowledge and understanding:

By the end of this course the student should be able to:

- a1- Describe advanced research techniques used in the field of infectious diseases.
- a2- Identify the basic knowledge about etiological agents and pathogenesis of different infectious diseases of sheep and goats.
- a3- list the major field problems concerned with infectious diseases of sheep and goats.



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- a4- Mention the basic knowledge about the treatment and control measures of different infectious diseases of sheep and goats.
- a5- Identify the important aspects regarding the diagnosis of different infectious diseases of sheep and goats.

B- Intellectual skills

By the end of this course the student should be able to:

- b1- analyze the field problems to reach a preliminary diagnosis.
- b2- suggest the suitable solutions during outbreaks and interpret the available data.
- b3- use the basic information for analysis of epidemics of infectious diseases of sheep and goats and enable the students how to interpret the available data to achieve diagnosis.
- b4 -Enhance the ability to differentiate between infectious diseases of sheep and goats.

C-Professional and practical skills

By the end of this course the student should be able to:

- c1- Perform the different methods and techniques of clinical examination.
- c2- Perform the different sampling methods.
- c3- Acquire the experience of planning of a control program.
- c4- Plan and apply the different methods of control programs.
- c5- Use epidemiological information of the early warning system for early diagnosis of infectious diseases.

D-General and transferable skills

By the end of studying the course, the student should be able to:

- d1-Enhance the skills of problem definition and how to deal with it.
- d2-Enhance skills of epizootiological data analysis, and clinical and laboratory examinations.
- d3- Enhance the experience of taking history in infected farms and Increase the ability of organizing control programs.
- d4- Collect the data of diseased animals in an informative and suitable manner.



Course specification

4-Topics and contents

Course	Topic	No. of hours	Lectures	Practical
Infectious diseases of sheep and goats	(Infection and infectious diseases Epidemiologic Triad, The chain of infection, transboundary diseases).	24	12	12
	Enteritis and pneumonia	20	10	10
	Problem of abortion.	20	10	10
	Exotic diseases.	20	10	10
	Infectious diseases causing skin affections	20	10	10
	Infectious diseases causing nervous manifestation.	20	10	10
	Parasitic diseases of sheep and goats	20	10	10
	Total	144	72	72

5-Teaching and learning methods

5.1- Lectures and oral presentations

5.2- Clinical sections.

5.3- The use of multimedia aids e.g slide projector, data show, video tapes.

6-Student assessment

6.1. Assessments methods:

Method	Matrix alignment of the measured ILOs/ Assessments methods			
	K&U	I.S	P&P.S	G.S
Final Exam	a1- a2- a3-a4	b1- b2- b3-b4		
Practical Exam		b1	c4	d1
Oral Exam	a1- a2- a3- a4	b1- b2- b3-b4-		



Course specification

6.2. Assessment schedules/semester:

Method	Week(s)
Writing exam	During December
Practical exam	During December
Oral exam	During December

6.3. Weight of assessments:

Assessment	Weight of assessment
Writing exam	50%
Practical exam	25%
Oral exam	25%
Total	100%

7- List of references

7.1. Notes and books

- Infectious diseases of domestic animals (2004/1588) by H.I.Hosein (2018) 4th Ed.

7.2. Essential books:

- Veterinary medicine 7th ed (A text book of the diseases of cattle, sheep, pigs, goats and horses) 1983.
- Veterinary clinical diagnosis 3th Ed. 1984
- Diseases of sheep 2nd Ed. 1982

7.3. Recommended texts

- The Merck veterinary manual 9th 2005

7.4. Journals, Websitesetc

Journals:

Journal of Veterinary Science
Research in Veterinary Science
Journal of Veterinary Diagnostic Investigation

Websites:

- 1-www.google.com
- 2-www.OIE
- 3-www.FAO
- 4-www.Canine web sites



Beni-Suef University
Faculty of Veterinary Medicine



Course specification

Course Coordinators

Head of Department

Dr. Hosein Abd Al Aal



Course specification

Topic	Week	Intended learning outcomes of course (ILOs)			
		K&U (a)	I.S (b)	P.P.S (c)	G.T.S (d)
(Infection and infectious diseases Epidemiologic Triad, The chain of infection, transboundry diseases).	1-6	a1,a2			
Enteritis and pneumonia	7-11	a1- a2- a3- a4	b1-b2- b3-b4		d1- d2 d3
Problem of abortion.	12-16	a1- a2- a3- a4	b1-b2- b3-b4		
Exotic diseases.	17-21	a1- a2- a3	b1-b2- b3-b4	c2, c4	d3, d4
Infectious diseases causing skin affections	22-26	a1- a2- a3- a4	b3-b4	c2	
Infectious diseases causing nervous manifestation.	27-31	a1- a2	b1-b2- b3		
Parasitic diseases of sheep and goats	32-36	a1- a2	b1-b2- b3	c2, c4	



Course specification

1-Basic information

Course Code:	<i>PhD</i> -142
Course title:	Infectious diseases of camels
Program title:	<i>PhD</i>
Contact hours/ week	4 hours per week (2 theoretical and 2 practical)
Approval Date	

2-Professional information

Overall aims of course:

This course aims to:

Recognize all theories, principles and basics of area of learning of infectious diseases of camels as well as other related sciences, employ the acquired knowledge of infectious diseases of camels together with other related topics and master different professional skills and techniques in diagnosis, prevention and control of infectious diseases of camel. Also, to support the basic knowledge about etiology, epizootiology, clinical signs, and diagnosis and control measures of infectious diseases of infectious diseases of camels, demonstrate an understanding of basic control management procedures and protocols including isolation, quarantine and disinfection and provide opportunities to understand the molecular and cellular mechanisms of disease process.

3- Intended learning outcomes of course (ILOs)

A-Knowledge and understanding:

By the end of this course the student should be able to:

- a1- Describe advanced research techniques used in the field of infectious diseases.
- a2- Identify the basic knowledge about etiological agents and pathogenesis of different infectious diseases of camel.
- a3- list the major field problems concerned with infectious



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diseases of camel.

a4- Mention the basic knowledge about the treatment and control measures of different infectious diseases of camels.

a5- Identify the important aspects regarding the diagnosis of different infectious diseases of camels.

B- Intellectual skills

By the end of this course the student should be able to:

b1- analyze the field problems to reach a preliminary diagnosis.

b2- suggest the suitable solutions during outbreaks and interpret the available data.

b3- use the basic information for analysis of epidemics of camels and to enable the students how to interpret the available data to achieve diagnosis.

b4 -Enhance the ability to differentiate between infectious diseases of camels.

C-Professional and practical skills

By the end of this course the student should be able to:

c1- Perform the different methods and techniques of clinical examination.

c2- Perform the different sampling methods.

c3- Acquire the experience of planning of a control program.

c4- Plan and apply the different methods of control programs.

c5- Use epidemiological information of the early warning system for early diagnosis of infectious diseases of camels.

D-General and transferable skills

By the end of studying the course, the student should be able to:

d1-Enhance the skills of problem definition and how to deal with it.

d2-Enhance skills of epizootiological data analysis, and clinical and laboratory examinations.

d3- Enhance the experience of taking history in infected farms and increase the ability of organizing control programs.

d4- Collect the data of diseased animals in an informative and suitable manner.

Course specification

4-Topics and contents

Course	Topic	Hours	Lectures	Practical
Infectious diseases of camels	Epidemiology of camel diseases	24	12	12
	Problem of enteritis and pneumonia	24	12	12
	Skin affections.	24	12	12
	Bacterial disorders.	24	12	12
	Viral diseases	24	12	12
	Blood parasites and internal parasites of camels	24	12	12
	Total	144	72	72

5-Teaching and learning methods

5.1- Lectures and oral presentations

5.2- Clinical sections.

5.3- The use of multimedia aids e.g slide projector, data show, video tapes.

6-Student assessment

6.1. Assessments methods:

Method	Matrix alignment of the measured ILOs/ Assessments methods			
	K&U	I.S	P&P.S	G.S
Final Exam	a1- a2- a3-a4	b1- b2- b3-b4		
Practical Exam		b1	c4	d1
Oral Exam	a1- a2- a3- a4	b1- b2- b3-b4-		

6.2. Assessment schedules/semester:

Method	Week(s)
Writing exam	During December
Practical exam	During December
Oral exam	During December



Course specification

6.3. Weight of assessments:

Assessment	Weight of assessment
Writing exam	50%
Practical exam	25%
Oral exam	25%
Total	100%

7- List of references

7.1. Notes and books

- Infectious diseases of domestic animals (2004/1588) by H.I.Hosein (2018) 4th Ed.

7.2. Essential books:

- Veterinary medicine 7th ed (A text book of the diseases of cattle, sheep, pigs, goats and horses) 1983.
- Veterinary clinical diagnosis 3th Ed. 1984
- Cattle diseases 1984
- Diseases of camels, Hagans 2nd Ed. 1982

7.3. Recommended texts

- The Merck veterinary manual 9th 2005

7.4. Journals, Websitesetc

Journals:

Journal of Veterinary Science
Research in Veterinary Science
Preventive Veterinary Medicine
The veterinary journal
Journal of Veterinary Diagnostic Investigation

Websites:

- 1-www.google.com
- 2-www.OIE
- 3-www.FAO
- 4-www.Canine web sites

Course Coordinators

Head of Department

Dr. Hosein Abd Al Aal



Course specification

1-Basic information

Course Code:	<i>PhD</i> -143
Course title:	Infectious diseases of equine
Program title:	<i>PhD</i>
Contact hours/ week	4 hours per week (2 theoretical and 2 practical)
Approval Date	

2-Professional information

Overall aims of course:

This course aims to:

Recognize all theories, principles and basics of area of learning of infectious diseases equine as well as other related sciences, employ the acquired knowledge of infectious diseases of equine together with other related topics and master different professional skills and techniques in diagnosis, prevention and control of infectious diseases of equine. Also, to support the basic knowledge about etiology, epizootiology, clinical signs, and diagnosis and control measures of infectious diseases of equine, demonstrate an understanding of basic control management procedures and protocols including isolation, quarantine and disinfection and provide opportunities to understand the molecular and cellular mechanisms of disease process.

3- Intended learning outcomes of course (ILOs)

A-Knowledge and understanding:

By the end of this course the student should be able to:

- a1- Describe advanced research techniques used in the field of infectious diseases.
- a2- Identify the basic knowledge about etiological agents and pathogenesis of different infectious diseases of equine.
- a3- list the major field problems concerned with infectious diseases of equine.



Course specification

- a4- Mention the basic knowledge about the treatment and control measures of different infectious diseases of equine.
- a5- Identify the important aspects regarding the diagnosis of different infectious diseases of equine.

B- Intellectual skills

By the end of this course the student should be able to:

- b1- analyze the field problems to reach a preliminary diagnosis.
- b2- suggest the suitable solutions during outbreaks and interpret the available data.
- b3- use the basic information for analysis of epidemics of equine and to enable the students how to interpret the available data to achieve diagnosis.
- b4 -Enhance the ability to differentiate between infectious diseases of equine.

C-Professional and practical skills

By the end of this course the student should be able to:

- c1- Perform the different methods and techniques of clinical examination.
- c2- Perform the different sampling methods.
- c3- Acquire the experience of planning of a control program.
- c4- Plan and apply the different methods of control programs.
- c5- Use epidemiological information of the early warning system for early diagnosis of infectious diseases of equine.

D-General and transferable skills

By the end of studying the course, the student should be able to:

- d1-Enhance the skills of problem definition and how to deal with it.
- d2-Enhance skills of epizootiological data analysis, and clinical and laboratory examinations.
- d3- Enhance the experience of taking history in infected farms and Increase the ability of organizing control programs.
- d4- Collect the data of diseased animals in an informative and suitable manner.

4-Topics and contents

Course specification

Course	Topic	No. of hours	Lectures	Practical
Infectious diseases of equine	Introduction of infectious diseases of equine	24	12	12
	Infectious diseases of newly born foals	20	10	10
	Infectious diseases causing abortion.	20	10	10
	Infectious diseases causing digestive disorders.	20	10	10
	Infectious diseases causing respiratory manifestation.	20	10	10
	Infectious diseases causing nervous manifestation.	20	10	10
	Parasitic diseases of equine	20	10	10
	Total	144	72	72

5-Teaching and learning methods

5.1- Lectures and oral presentations

5.2- Clinical sections.

5.3- The use of multimedia aids e.g slide projector, data show, video tapes.

6-Student assessment

6.1. Assessments methods:

Method	Matrix alignment of the measured ILOs/ Assessments methods			
	K&U	I.S	P&P.S	G.S
Final Exam	a1- a2- a3-a4	b1- b2- b3-b4		
Practical Exam		b1	c4	d1
Oral Exam	a1- a2- a3- a4	b1- b2- b3-b4-		

6.2. Assessment schedules/semester:



Course specification

Method	Week(s)
Writing exam	During December
Practical exam	During December
Oral exam	During December

6.3. Weight of assessments:

Assessment	Weight of assessment
Writing exam	50%
Practical exam	25%
Oral exam	25%
Total	100%

7- List of references

7.1. Notes and books

- Infectious diseases of domestic animals (2004/1588) by H.I.Hosein (2018) 4th Ed.

7.2. Essential books:

- Veterinary medicine 7th ed (A text book of the diseases of cattle, sheep, pigs, goats and horses) 1983.
- Veterinary clinical diagnosis 3th Ed. 1984
- Equine diseases 1984
- A color atlas of equine diseases 1985

7.3. Recommended texts

- The Merck veterinary manual 9th 2005

7.4. Journals, Websitesetc

Journals:

Journal of Veterinary Science
Research in Veterinary Science
Preventive Veterinary Medicine
The veterinary journal
Journal of Veterinary Diagnostic Investigation

Websites:

- 1-www.google.com
- 2-www.OIE



Beni-Suef University
Faculty of Veterinary Medicine



Course specification

3-www.FAO

4-www.Canine web sites

Course Coordinators

Head of Department

Dr. Hosein Abd Al Aal



Course specification

1-Basic information

Course Code:	<i>PhD</i> -144
Course title:	Infectious diseases of pets
Program title:	<i>PhD</i>
Contact hours/ week	4 hours per week (2 theoretical and 2 practical)
Approval Date	

2-Professional information

Overall aims of course:

This course aims to:

Recognize all theories, principles and basics of area of learning of infectious diseases of pets as well as other related sciences, employ the acquired knowledge of infectious diseases of pets together with other related topics and master different professional skills and techniques in diagnosis, prevention and control of infectious diseases of pets. Also, to support the basic knowledge about etiology, epizootiology, clinical signs, and diagnosis and control measures of infectious diseases of pets, demonstrate an understanding of basic control management procedures and protocols including isolation, quarantine and disinfection and provide opportunities to understand the molecular and cellular mechanisms of disease process.

3- Intended learning outcomes of course (ILOs)

A-Knowledge and understanding:

By the end of this course the student should be able to:

- a1- Describe advanced research techniques used in the field of infectious diseases
- a2- Identify the basic knowledge about etiological agents and pathogenesis of different diseases of pet animals.
- a3- list the major field problems concerned with infectious diseases of pet animals.
- a4- Mention the basic knowledge about the treatment and control measures of different diseases of pet animals.



Course specification

a5- Identify the important aspects regarding the diagnosis of different diseases of pet animals.

B- Intellectual skills

By the end of this course the student should be able to:

b1- analyze the disease problems to reach a preliminary diagnosis.

b2- suggest the suitable solutions during outbreaks and interpret the available data.

b3- use the basic information for analysis of epidemics of pet animals and interpret the available data to achieve diagnosis.

b4 -enhance the ability to differentiate between diseases of pet animals.

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C-Professional and practical skills

By the end of this course the student should be able to:

c1- perform the different methods and techniques of clinical examination.

c2- perform the different sampling methods.

c3- acquire the experience of planning of a control program.

c4- plan and apply the different methods of control programs.

D-General and transferable skills

By the end of studying the course, the student should be able to:

d1-enhance the skills of problem definition and how to deal with it.

d2-enhance skills of epizootiological data analysis, and clinical and laboratory examinations.

d3- enhance the experience of taking history in infected farms and increase the ability of organizing control programs.

d4- collect the data of diseased animals in an informative and suitable manner.

4-Topics and contents

Course	Topic	No. of hours	Lectures	Practical

Course specification

Infectious diseases of pets	Epidemiology of infectious diseases of pets.	24	12	12
	Diseases of neonates.	24	12	12
	Bacterial diseases of pets	24	12	12
	Viral diseases of pets.	24	12	12
	Parasitic diseases of pet animals	24	12	12
	Program of vaccination	24	12	12
	Total	144	72	72

5-Teaching and learning methods

5.1- Lectures and oral presentations

5.2- Clinical sections.

5.3- The use of multimedia aids e.g slide projector, data show, video tapes.

6-Student assessment

6.1. Assessments methods:

Method	Matrix alignment of the measured ILOs/ Assessments methods			
	K&U	I.S	P&P.S	G.S
Final Exam	a1- a2- a3-a4	b1- b2- b3-b4		
Practical Exam		b1	c4	d1
Oral Exam	a1- a2- a3- a4	b1- b2- b3-b4-		

6.2. Assessment schedules/semester:

Method	Week(s)
Writing exam	45 th
Practical exam	45 th
Oral exam	45 th

6.3. Weight of assessments:

Assessment	Weight of assessment
Writing exam	50%



Course specification

Practical exam	25%
Oral exam	25%
Total	100%

7- List of references

7.1. Notes and books

- Infectious diseases of domestic animals (2004/1588) by H.I.Hosein (2018) 4th Ed.

7.2. Essential books:

- Textbook of Veterinary Internal Medicine: Diseases of the Cat and Dog. Stephen J. Ettinger 1905
- Veterinary medicine 7th ed (A text book of the diseases of cattle, sheep, pigs, goats and horses) 1983.
- A color atlas of small animal dermatology 1985

7.3. Recommended texts

- The Merck veterinary manual 9th 2005

7.4. Journals, Websitesetc

Journals:

- Journal of Exotic Pet Medicine - Elsevier
- Journal of Exotic Pet Medicine
- Journal of Pet Animal Nutrition - J-Stage
- Journal of Veterinary Science
- Journal of Veterinary Diagnostic Investigation

Websites:

- 1-www.google.com
- 2-www.OIE
- 3-www.FAO
- 4-www.Canine web sites

Course Coordinators

Head of Department
Dr. Hosein Abd Al Aal



Course specification

Topic	Week	Intended learning outcomes of course (ILOs)			
		K&U (a)	I.S (b)	P.P.S (c)	G.T.S (d)
Epidemiology of infectious diseases of pets.	1-6	a1,a2			
Diseases of neonates.	7-11	a1- a2- a3- a4	b1-b2- b3-b4		d1- d2 d3
Bacterial diseases of pets	12-16	a1- a2- a3- a4	b1-b2- b3-b4		
viral diseases of pets	17-21	a1- a2- a3	b1-b2- b3-b4	c2, c4	d3, d4
Parasitic diseases of pet animals	22-26	a1- a2- a3- a4	b3-b4	c2	
Program of vaccination	27-36	a1- a2	b1-b2- b3		



Course specification

1-Basic information

Course Code:	<i>PhD</i> -145
Course title:	Infectious diseases of laboratory animals
Program title:	<i>PhD</i>
Contact hours/ week	3 hours per week (1 theoretical and 2 practical)
Approval Date	

2-Professional information

Overall aims of course:

This course aims to:

Recognize all theories, principles and basics of area of learning of laboratory animal's infectious diseases as well as other related sciences, employ the acquired knowledge of laboratory animal's infectious diseases together with other related topics and master different professional skills and techniques in diagnosis, prevention and control of laboratory animal's infectious diseases. Also, to support the basic knowledge about etiology, epizootiology, clinical signs, and diagnosis and control measures of laboratory animal's infectious diseases, demonstrate an understanding of basic control management procedures and protocols including isolation, quarantine and disinfection and provide opportunities to understand the molecular and cellular mechanisms of disease process.

3- Intended learning outcomes of course (ILOs)

A-Knowledge and understanding:

By the end of this course the student should be able to:

- a1- Describe advanced research techniques used in the field of infectious diseases.
- a2- Identify the basic knowledge about etiological agents and pathogenesis of different infectious diseases of laboratory animals.



Course specification

a3- list the major problems concerned with infectious diseases of laboratory animals.

a4- Mention the basic knowledge about the treatment and control measures of different infectious diseases of laboratory animals.

a5- Identify the important aspects regarding the diagnosis of different infectious diseases of laboratory animals.

B- Intellectual skills

By the end of this course the student should be able to:

b1- analyze the field problems to reach a preliminary diagnosis.

b2- suggest the suitable solutions during outbreaks and interpret the available data.

b3- use the basic information for analysis of epidemics of laboratory animals and to enable the students how to interpret the available data to achieve diagnosis.

b4 -Enhance the ability to differentiate between infectious diseases of laboratory animals.

C-Professional and practical skills

By the end of this course the student should be able to:

c1- Perform the different methods and techniques of clinical examination.

c2- Perform the different sampling methods.

c3- Acquire the experience of planning of a control program.

c4- Plan and apply the different methods of control programs.

D-General and transferable skills

By the end of studying the course, the student should be able to:

d1-Enhance the skills of problem definition and how to deal with it.

d2-Enhance skills of epizootiological data analysis, and clinical and laboratory examinations.

d3- Enhance the experience of taking history in infected farms and Increase the ability of organizing control programs.

d4- Collect the Data of diseased animals in an informative and suitable manner.



Course specification

4-Topics and contents

Course	Topic	No. of hours	Lectures	Practical
Infectious diseases of laboratory animals	Epidemiology of infectious diseases of laboratory animals	18	6	12
	Management of laboratory animals.	18	6	12
	Experimental infections	18	6	12
	Bacterial disorders.	18	6	12
	Viral diseases.	18	6	12
	Parasitic diseases	18	6	12
	Total	108	36	72

5-Teaching and learning methods

5.1- Lectures and oral presentations

5.2- Clinical sections.

5.3- The use of multimedia aids e.g slide projector, data show, video tapes.

6-Student assessment

6.1. Assessments methods:

Method	Matrix alignment of the measured ILOs/ Assessments methods			
	K&U	I.S	P&P.S	G.S
Final Exam	a1- a2- a3-a4	b1- b2- b3-b4		
Practical Exam		b1	c4	d1
Oral Exam	a1- a2- a3- a4	b1- b2- b3-b4-		

6.2. Assessment schedules/semester:

Method	Week(s)
Writing exam	During December
Practical exam	During December
Oral exam	During December



Course specification

6.3. Weight of assessments:

Assessment	Weight of assessment
Writing exam	50%
Practical exam	25%
Oral exam	25%
Total	100%

7- List of references

7.1. Notes and books

- Infectious diseases of domestic animals (2004/1588) by H.I.Hosein (2018) 4th Ed.

7.2. Essential books:

- Veterinary medicine 7th ed (A text book of the diseases of cattle, sheep, pigs, goats and horses) 1983.
- Laboratory animal diseases 3th Ed. 1984

7.3. Recommended texts

- The Merck veterinary manual 9th 2005

7.4. Journals, Websitesetc

Journals:

Journal of Veterinary Science
Research in Veterinary Science
Journal of Veterinary Diagnostic Investigation

Websites:

- 1-www.google.com
- 2-www.OIE
- 3-www.FAO
- 4-www.Canine web sites

Course Coordinators

Head of Department

Dr. Hosein Abd Al Aal



Course specification

Topic	Week	Intended learning outcomes of course (ILOs)			
		K&U (a)	I.S (b)	P.P.S (c)	G.T.S (d)
Epidemiology of infectious diseases of laboratory animals	1-6	a1,a2			
Management of laboratory animals.	7-11	a1- a2- a3- a4	b1-b2- b3-b4		d1- d2 d3
Experimental infections	12-16	a1- a2- a3- a4	b1-b2- b3-b4		
Bacterial diseases.	17-21	a1- a2- a3	b1-b2- b3-b4	c2, c4	d3, d4
Viral diseases.	22-26	a1- a2- a3- a4	b3-b4	c2	
Parasitic diseases	27-36	a1- a2	b1-b2- b3		



Course specification

1-Basic information

Course Code:	<i>PhD</i> -146
Course title:	Infectious diseases of new born calves and udder
Program title:	<i>PhD</i>
Contact hours/ week	4 hours per week (2 theoretical and 2 practical)
Approval Date	

2-Professional information

Overall aims of course:

This course aims to:

Recognize all theories, principles and basics of area of learning of infectious diseases of new born calves and udder as well as other related sciences, employ the acquired knowledge of infectious diseases of new born calves and udder together with other related topics and master different professional skills and techniques in diagnosis, prevention and control of infectious diseases of new born calves and udder. Also, to support the basic knowledge about etiology, epizootiology, clinical signs, and diagnosis and control measures of infectious diseases of new born calves and udder, demonstrate an understanding of basic control management procedures and protocols including isolation, quarantine and disinfection and provide opportunities to understand the molecular and cellular mechanisms of disease process.

3- Intended learning outcomes of course (ILOs)

A-Knowledge and understanding:

By the end of this course the student should be able to:

a1- Describe the advanced research techniques used in the field of infectious diseases.

a2- Identify the basic knowledge about etiological agents and



Course specification

pathogenesis of different infectious diseases of calves and udder.

a3- list the major field problems concerned with infectious diseases of calves and udder.

a4- Mention the basic knowledge about the treatment and control measures of different infectious diseases of calves and udder.

a5- Identify the important aspects regarding the diagnosis of different infectious diseases of calves and udder.

B- Intellectual skills

By the end of this course the student should be able to:

b1- analyze the field problems to reach a preliminary diagnosis.

b2- suggest the suitable solutions during outbreaks and interpret the available data.

b3- use the basic information for analysis of epidemics of calves and to enable the students how to interpret the available data to achieve diagnosis.

b4 -Enhance the ability to differentiate between infectious diseases of calves and udder.

C-Professional and practical skills

By the end of this course the student should be able to:

c1- Perform the different methods and techniques of clinical examination.

c2- Perform the different sampling methods.

c3- Acquire the experience of planning of a control program.

c4- Plan and apply the different methods of control programs.

c5- Use epidemiological information of the early warning system for early diagnosis of infectious diseases of calves and udder.

D-General and transferable skills

By the end of studying the course, the student should be able to:

d1-Enhance the skills of problem definition and how to deal with it.

d2-Enhance skills of epizootiological data analysis, and clinical and laboratory examinations.

d3- Enhance the experience of taking history in infected farms and increase the ability of organizing control programs.

d4- Collect the data of diseased animals in an informative and suitable



Course specification

manner.

4-Topics and contents

Course	Topic	No. of hours	Lectures	Practical
Infectious diseases of new born calves and udder	Immunological aspect of infectious diseases of newly born animals	12	20	12
	Management factor of infectious diseases of newly born animals	24	12	12
	Infectious diseases causing diarrhea	24	12	12
	Infectious diseases causing respiratory manifestation.	24	12	12
	Clinical and subclinical mastitis	24	12	12
	Udder affections	24	12	12
	Total	144	72	72

5-Teaching and learning methods

5.1- Lectures and oral presentations

5.2- Clinical sections.

5.3- The use of multimedia aids e.g slide projector, data show, video tapes.

6-Student assessment

6.1. Assessments methods:

Method	Matrix alignment of the measured ILOs/ Assessments methods			
	K&U	I.S	P&P.S	G.S
Final Exam	a1- a2- a3-a4	b1- b2- b3-b4		
Practical Exam		b1	c4	d1
Oral Exam	a1- a2- a3- a4	b1- b2- b3-b4-		



Course specification

6.2. Assessment schedules/semester:

Method	Week(s)
Writing exam	During December
Practical exam	During December
Oral exam	During December

6.3. Weight of assessments:

Assessment	Weight of assessment
Writing exam	50%
Practical exam	25%
Oral exam	25%
Total	100%

7- List of references

7.1. Notes and books

- Infectious diseases of domestic animals (2004/1588) by H.I.Hosein (2018) 4th Ed.

7.2. Essential books:

- Veterinary medicine 7th ed (A text book of the diseases of cattle, sheep, pigs, goats and horses) 1983.
- Bovine Medicine 3th Ed. 1984
- Cattle diseases 1984
- Diseases of sheep 2nd Ed. 1982
- A color atlas of small animal dermatology 1985

7.3. Recommended texts

- The Merck veterinary manual 9th 2005

7.4. Journals, Websitesetc

Journals:

Journal of Veterinary Science
Research in Veterinary Science
Preventive Veterinary Medicine
The veterinary journal
Journal of Veterinary Diagnostic Investigation



Beni-Suef University
Faculty of Veterinary Medicine



Course specification

Websites:

- 1-www.google.com
- 2-www.OIE
- 3-www.FAO
- 4-www.Canine web sites

Course Coordinators

Head of Department

Dr. Hosein Abd Al Aal



Course specification

Topic	Week	Intended learning outcomes of course (ILOs)			
		K&U (a)	I.S (b)	P.P.S (c)	G.T.S (d)
Introduction of infectious diseases of newly born animals Immunological aspect of infectious diseases of newly born animals	1-6	a1,a2			
Management factor of infectious diseases of newly born animals	7-11	a1- a2- a3- a4	b1-b2- b3-b4		d1- d2 d3
Infectious diseases causing diarrhea	12-16	a1- a2- a3- a4	b1-b2- b3-b4		
Infectious diseases causing respiratory manifestation.	17-21	a1- a2- a3	b1-b2- b3-b4	c2, c4	d3, d4
Clinical and subclinical mastitis	22-26	a1- a2- a3- a4	b3-b4	c2	
udder affections	27-36	a1- a2	b1-b2- b3		



Course specification

1-Basic information

Course Code:	<i>PhD</i> -147
Course title:	Infectious diseases of wildlife animals
Program title:	<i>PhD</i>
Contact hours/ week	3 hours per week (1 theoretical and 2 practical)
Approval Date	

2-Professional information

Overall aims of course:

This course aims to:

Recognize all theories, principles and basics of area of learning of infectious diseases of wildlife animals as well as other related sciences, employ the acquired knowledge of infectious diseases of wildlife animals together with other related topics and master different professional skills and techniques in diagnosis, prevention and control of infectious diseases of wildlife animals. Also, to support the basic knowledge about etiology, epizootiology, clinical signs, and diagnosis and control measures of infectious diseases of wildlife animals, demonstrate an understanding of basic control management procedures and protocols including isolation, quarantine and disinfection and provide opportunities to understand the molecular and cellular mechanisms of disease process.

3- Intended learning outcomes of course (ILOs)

A-Knowledge and understanding:

By the end of this course the student should be able to:

- a1- Describe advanced research techniques used in the field of infectious diseases.
- a2- Identify the basic knowledge about etiological agents and pathogenesis of different infectious diseases of wildlife animals.
- a3- list the major field problems concerned with infectious diseases of farm animals.



Course specification

a4- Mention the basic knowledge about the treatment and control measures of different infectious and non-infectious diseases of wildlife animals.

a5- Identify the important aspects regarding the diagnosis of different infectious diseases of wildlife animals.

B- Intellectual skills

By the end of this course the student should be able to:

b1- analyze the field problems to reach a preliminary diagnosis.

b2- suggest the suitable solutions during outbreaks and interpret the available data.

b3- use the basic information for analysis of epidemics of wildlife animals and to enable the students how to interpret the available data to achieve diagnosis.

b4 -Enhance the ability to differentiate between infectious diseases of wildlife animals.

C-Professional and practical skills

By the end of this course the student should be able to:

c1- Perform the different methods and techniques of clinical examination.

c2- Perform the different sampling methods.

c3- Acquire the experience of planning of a control program.

c4- Plan and apply the different methods of control programs.

D-General and transferable skills

By the end of studying the course, the student should be able to:

d1-Enhance the skills of problem definition and how to deal with it.

d2-Enhance skills of epizootiological data analysis, and clinical and laboratory examinations.

d3- Enhance the experience of taking history in infected farms and increase the ability of organizing control programs.

d4- Collect the data of diseased animals in an informative and suitable manner.

4-Topics and contents

Course specification

Course	Topic	No. of hours	Lectures	Practical
Infectious diseases of wildlife animals	Ecology of wild life	18	6	12
	Different ecosystems	18	6	12
	Management of wild life diseases.	18	6	12
	Drug administration in wild animals	18	6	12
	Infectious diseases of wild life	18	6	12
	Control of infectious diseases of wild life	18	6	12
	Total		108	36

5-Teaching and learning methods

5.1- Lectures and oral presentations

5.2- Clinical sections.

5.3- The use of multimedia aids e.g slide projector, data show, video tapes.

6-Student assessment

6.1. Assessments methods:

Method	Matrix alignment of the measured ILOs/ Assessments methods			
	K&U	I.S	P&P.S	G.S
Final Exam	a1- a2- a3-a4	b1- b2- b3-b4		
Practical Exam		b1	c4	d1
Oral Exam	a1- a2- a3- a4	b1- b2- b3-b4-		

6.2. Assessment schedules/semester:

Method	Week(s)
Writing exam	During December
Practical exam	During December
Oral exam	During December

6.3. Weight of assessments:



Course specification

Assessment	Weight of assessment
Writing exam	50%
Practical exam	25%
Oral exam	25%
Total	100%

7- List of references

7.1. Notes and books

- Infectious diseases of domestic animals (2004/1588) by H.I.Hosein (2018) 4th Ed.

7.2. Essential books:

- Essentials of Disease in Wild Animals, Gary A. Wobeser
- Disease in Wild Animals: Investigation and Management, Gary A. Wobeser (Author)
- Veterinary medicine 7th ed (A text book of the diseases of cattle, sheep, pigs, goats and horses) 1983.
- A color atlas of small animal dermatology 1985

7.3. Recommended texts

- The Merck veterinary manual 9th 2005

7.4. Journals, Websitesetc

Journals:

Journal of Wildlife Diseases
European Journal of Wildlife Research - Springer
Journal of Zoo and Wildlife Medicine
International Journal for Parasitology: Parasites and Wildlife
Journal of Veterinary Diagnostic Investigation

Websites:

- 1-www.google.com
- 2-www.OIE
- 3-www.FAO
- 4-www.Canine web sites

Course Coordinators

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Head of Department
Dr. Hosein Abd Al Aal



Course specification

Topic	Week	Intended learning outcomes of course (ILOs)			
		K&U (a)	I.S (b)	P.P.S (c)	G.T.S (d)
Ecology of wild life	1-6	a1,a2			
Different ecosystems	7-11	a1- a2- a3- a4	b1-b2- b3-b4		d1- d2 d3
Management of wild life diseases	12-16	a1- a2- a3- a4	b1-b2- b3-b4		
Drug adminnstration in wild animals	17-21	a1- a2- a3	b1-b2- b3-b4	c2, c4	d3, d4
Infectious diseases of wild life	22-26	a1- a2- a3- a4	b3-b4	c2	
Control of diseases of wild life	27-36	a1- a2	b1-b2- b3		