



Beni-Suef University
Faculty of Veterinary Medicine
Department of Hygiene, Zoonoses and Epidemiology

Program Specification for PhD Degree
2017-2018

A-Basic information:

- 1- **Course title:** PhD. **Specialty:** - PhD-ZOON
- 2- **Program type:** *Single*
- 3- **Department offering program:** Hygiene, Management and Zoonoses
- 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-Supply the students with advanced information about the epidemiology and socio-economic impact of zoonotic diseases, diseases that are naturally transmitted between man and vertebrate animals and the most advanced methods for controlling zoonoses.

2- Be aware of current veterinary and public health zoonotic diseases and recent related approaches also recognize the recent techniques, principles and basics of his/her area of learning and other related scientific research.

3- Provide graduates the opportunity to master communication skills and skills of collection, management and analysis of the scientific data in the field of zoonoses.

4- Manage problems of zoonotic disease occurrence and finding solutions based on sound scientific research concepts and be committed to veterinary professional practice regulations and ethic as well the skills of writing and presentation of the 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. Recall knowledge about definition, etiology and occurrence of zoonotic disease and specify the transmission mechanisms of zoonotic agents from the animals to man.
 - a..2. Recall the role played by the different species of domestic and wild animals and birds, rodents, the aquatic life and arthropod vectors in the epidemiology of various zoonoses and outline the emerging of drug resistance zoonotic diseases.
 - a.3. Recognize the factors of emergency of infection of various zoonoses in human populations & delineate the control strategies applicable to prevent the spread of zoonoses.
 - a.4. Specify the emergency of new zoonotic and transpoundry diseases and the mechanism of emergency.
 - a.5. Describe advanced diagnostic techniques used in the field of Zoonoses.
 - a.6. Apply their knowledge and understanding of Zoonoses to solving of problems of zoonotic nature with the available resources, analysis and discussion of the scientific literature.
- 7- Perceive advanced veterinary scientific research principles, regulations, ethics and its different tools.
- 8- Be aware of the importance of veterinary professional practice on community development and environment protection from zoonotic diseases.

b- Intellectual capacity:

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

- b.1. Compare the characteristic clinical picture of different zoonoses in the animal and human hosts.
- b.2. Assess the specific problems of possible zoonotic origin via analysis of laboratory reports for problem solving.
- b.3- Design a scientific research plan.
- b.4- Interpret the research data and develop new approach to deal with
the research questions.
- b.5- Develop creative approaches to solve technical problems facing him during the completion if the researches project.
- b.6- Master a scientific research studies with applied impact.
- b.7- Make a decision in dealing with variable professional practices.

c- Professional and practical skills:

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

- c.1. Identify the lesions of some selected zoonoses.
- c.2. Master the collection, examination and identification of different specimens for various zoonotic agents.
- c.3. Implement the up to date technology in the collection, examination and identification of different specimens for various zoonotic agents.
- c.4. Obtain the principles of good experimental design and analysis to their own
research project.
- c.5. Manage a research project in the field of Zoonoses concerning technical, ethical and safety issues and associated costs.
- c.6. Select and perform relevant statistical analysis on data obtained for the
running research.
- c.7. Write professionally scientific paper and presentation.

d- General and transferable skills:

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

- d1- Master the skills of learning independently in preparation for own research.

d2-Present research finding in oral and written form using appropriate software (e.g., power point, word, excel and data base).

d.3- Communicate effectively and use of information technology in the development of veterinary professional skills.

d.4- Manage time efficiently and work in research groups.

3- Academic standers:

* The faculty mission, vision and strategic objective are confirmed to the academic standard. The learning outcomes are inline 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: 48 weeks.

b-Program structure: 3-5 preliminary courses

Hours/ week:

Theoretical Practical Total

Preliminary courses

Code	Course title	Hours /week		Academic year	Teaching duration
		Theoretical	practical		
According to selected courses	Selected (3-5) PhD courses from the various Faculty Departments programs	5-8	6-8	Preliminary year	36 weeks

	depending on the thesis title.				
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D- Courses contents

See courses specification

5- Program Admission Requirements

* According to the Faculty of Veterinary Medicine, Beni-Suef University Bylaws for 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 roles:

No. of course teaching hours/ week	Allowed written examined 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 courses is less than 75%.

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

-The applicant should submit a seminar within 2years 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 Bylaws for 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	By the end of the year	By the end of the year	By the end of the year
Marks	25	25	50

Assessments methods	Matrix alignment of the measured ILOs			
	K&U (a)	I.S (b)	P&P. S (c)	G&T. S (d)
Written exam	1,2,3,4,5,6,7,8	2,3,6		

Ph.D. Thesis:

The Ph.D. students should prepare a thesis in Zoonoses. 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.

Practical exam			1,2,3,4,5,6,7	
Oral exam		1, 4,5, ,7		1,2,3,4

B- Matrix alignment of the measured ILOs

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	

Course coordinator

Department
Dr./Gihan Kamal eldin Abdel-latif
Ali Ibrahim

Head of the

Prof. Dr./ Mohamed

PhD program specification matrix (program courses with ILOS)

Program ILOS		Courses
Knowledge and understanding	A1	Principle, 196-197-198,118
	A2	195,190
	A3	196
	A4	196
	A5	122-100-102-97-95
	A6	221 -222-191
	A7	113-118
Intellectual skills	B1	196,principle
	B2	Thesis
	B3	178,87,122,113,116,128,181,100
	B4	Thesis, 221
	B5	92-116-195
	B6	190
	B7	thesis
Professional and practical skills	C1	196,principle
	C2	196
	C3	195,116,92
	C4	178
	C5	Thesis
	C6	212
General and transferrable skills	D1	Thesis
	D2	222
	D3	223
	D4	212

PhD program specification matrix (program ILOS with academic standards ARS)

Academic standards Program ILOs	Knowledge and understanding					Intellectual skills									Professional and practical skills					General and transferrable skills							
	a.1	a.2	a.3	a.4	a.5	b.1	b.2	b.3	b.4	b.5	b.6	b.7	b.8	b.9	c.1	c.2	c.3	c.4	c.5	d.1	d.2	d.3	d.4	d.5	d.6	d.7	
Knowledge and understanding																											
a.1	+																										+
a.2	+																										+
a.3	+																										+
a.4	+											+															+
a.5			+					+							+					+							+
a.6				+	+	+	+	+			+	+	+	+		+	+	+	+	+	+	+	+	+	+	+	+
a.7		+	+	+	+			+	+		+			+				+						+			+
a.8				+	+					+	+	+		+				+	+								
Intellectual skills																											
b.1	+		+				+								+					+							
b.2	+	+	+		+		+			+			+		+	+					+	+					
b.3		+				+			+		+				+	+	+	+	+		+	+					
b.4						+				+		+		+		+		+	+		+		+	+	+	+	+
b.5					+	+	+				+	+	+										+	+			+
b.6				+	+	+		+	+			+							+	+			+	+	+	+	+
b.7	+		+	+		+					+	+					+	+			+	+		+			+
Professional and practical skills																											
c.1	+				+				+											+							
c.2																				+							
c.3	+		+	+	+	+			+				+		+		+	+		+			+	+	+	+	+
c.4		+	+	+		+	+	+	+	+	+	+	+		+		+			+	+	+	+	+	+	+	+

c.5				+	+	+	+	+	+	+	+	+	+	+			+	+			+	+	+	
c.6					+	+					+			+			+	+						
c.7			+					+	+		+			+			+						+	
General and transferrable skills																								
d.1		+	+		+	+	+	+	+	+	+	+	+	+	+		+					+		+
d.2					+	+	+	+	+	+			+	+	+	+					+	+	+	
d.3			+		+	+			+			+		+	+		+	+			+	+	+	
d.4											+	+		+			+					+		+

Program aims – ILOS Matrix for the PhD program (PhD-Zoon)

مصفوفة اهداف البرنامج مع مخرجات التعلم المستهدفة

Program ILOS		Program ILOS			
		Program aims			
		1-Supply the students with advanced information about the epidemiology and socio-economic impact of zoonotic diseases, diseases that are naturally transmitted between man and vertebrate animals and the most advanced methods for controlling zoonoses.	2- Be aware of current veterinary and public health zoonotic diseases and recent related approaches also recognize the recent techniques, principles and basics of his/her area of learning and other related scientific research.	3- Provide graduates the opportunity to master communication skills and skills of collection, management and analysis of the scientific data in the field of zoonoses.	4- Manage problems of zoonotic disease occurrence and finding solutions based on sound scientific research concepts and be committed to veterinary professional practice regulations and ethic as well the skills of writing and presentation of the scientific papers.
Knowledge and understanding	a.1. Recall knowledge about definition, etiology and occurrence of zoonotic disease and specify the transmission mechanisms of zoonotic agents from the animals to man.	√			
	a..2. Recall the role played by the different species of domestic and wild animals and birds, rodents, the	√			

Program ILOs		Program aims			
		1-Supply the students with advanced information about the epidemiology and socio-economic impact of zoonotic diseases, diseases that are naturally transmitted between man and vertebrate animals and the most advanced methods for controlling zoonoses.	2- Be aware of current veterinary and public health zoonotic diseases and recent related approaches also recognize the recent techniques, principles and basics of his/her area of learning and other related scientific research.	3- Provide graduates the opportunity to master communication skills and skills of collection, management and analysis of the scientific data in the field of zoonoses.	4- Manage problems of zoonotic disease occurrence and finding solutions based on sound scientific research concepts and be committed to veterinary professional practice regulations and ethic as well the skills of writing and presentation of the scientific papers.
	aquatic life and arthropod vectors in the epidemiology of various zoonoses and Outline the emerging of drug resistance zoonotic diseases.				
	a.3. Recognize the factors of emergency of infection of various zoonoses in human populations & delineate the control strategies applicable to prevent the spread of zoonoses.	√			
	a.4. Specify the	√			

Program ILOs		Program aims			
		1-Supply the students with advanced information about the epidemiology and socio-economic impact of zoonotic diseases, diseases that are naturally transmitted between man and vertebrate animals and the most advanced methods for controlling zoonoses.	2- Be aware of current veterinary and public health zoonotic diseases and recent related approaches also recognize the recent techniques, principles and basics of his/her area of learning and other related scientific research.	3- Provide graduates the opportunity to master communication skills and skills of collection, management and analysis of the scientific data in the field of zoonoses.	4- Manage problems of zoonotic disease occurrence and finding solutions based on sound scientific research concepts and be committed to veterinary professional practice regulations and ethic as well the skills of writing and presentation of the scientific papers.
	emergency of new zoonotic and transpoundry diseases and the mechanism of emergency.				
	a.5. Describe advanced diagnostic techniques used in the field of Zoonoses.		√	√	
	a.6. Apply their knowledge and understanding of Zoonoses to solving of problems of zoonotic nature with the available resources, analysis and discussion of the scientific literature.	√			√

Program ILOS	Program ILOs	Program aims			
		1-Supply the students with advanced information about the epidemiology and socio-economic impact of zoonotic diseases, diseases that are naturally transmitted between man and vertebrate animals and the most advanced methods for controlling zoonoses.	2- Be aware of current veterinary and public health zoonotic diseases and recent related approaches also recognize the recent techniques, principles and basics of his/her area of learning and other related scientific research.	3- Provide graduates the opportunity to master communication skills and skills of collection, management and analysis of the scientific data in the field of zoonoses.	4- Manage problems of zoonotic disease occurrence and finding solutions based on sound scientific research concepts and be committed to veterinary professional practice regulations and ethic as well the skills of writing and presentation of the scientific papers.
	7- Perceive advanced veterinary scientific research principles, regulations, ethics and its different tools.	√		√	
	8- Be aware of the importance of veterinary professional practice on community development and environment			√	√

Program ILOs		Program aims			
		1-Supply the students with advanced information about the epidemiology and socio-economic impact of zoonotic diseases, diseases that are naturally transmitted between man and vertebrate animals and the most advanced methods for controlling zoonoses.	2- Be aware of current veterinary and public health zoonotic diseases and recent related approaches also recognize the recent techniques, principles and basics of his/her area of learning and other related scientific research.	3- Provide graduates the opportunity to master communication skills and skills of collection, management and analysis of the scientific data in the field of zoonoses.	4- Manage problems of zoonotic disease occurrence and finding solutions based on sound scientific research concepts and be committed to veterinary professional practice regulations and ethic as well the skills of writing and presentation of the scientific papers.
	protection from zoonotic diseases.				
Intellectual skills	b.1. Compare the characteristic clinical picture of different zoonoses in the animal and human hosts.	√			
	b.2. Assess the specific problems of possible zoonotic origin via analysis of laboratory reports for problem solving.		√	√	√

Program ILOs		Program aims			
		1-Supply the students with advanced information about the epidemiology and socio-economic impact of zoonotic diseases, diseases that are naturally transmitted between man and vertebrate animals and the most advanced methods for controlling zoonoses.	2- Be aware of current veterinary and public health zoonotic diseases and recent related approaches also recognize the recent techniques, principles and basics of his/her area of learning and other related scientific research.	3- Provide graduates the opportunity to master communication skills and skills of collection, management and analysis of the scientific data in the field of zoonoses.	4- Manage problems of zoonotic disease occurrence and finding solutions based on sound scientific research concepts and be committed to veterinary professional practice regulations and ethic as well the skills of writing and presentation of the scientific papers.
	b.3- Design a scientific research plan.				√
	b.4- Interpret the research data and develop new approach to deal with the research questions.			√	√
	b.5- Develop creative approaches to solve technical problems facing him during the completion if the researches project.		√	√	
	b.6- Master a scientific		√	√	

Program ILOs		Program aims			
		1-Supply the students with advanced information about the epidemiology and socio-economic impact of zoonotic diseases, diseases that are naturally transmitted between man and vertebrate animals and the most advanced methods for controlling zoonoses.	2- Be aware of current veterinary and public health zoonotic diseases and recent related approaches also recognize the recent techniques, principles and basics of his/her area of learning and other related scientific research.	3- Provide graduates the opportunity to master communication skills and skills of collection, management and analysis of the scientific data in the field of zoonoses.	4- Manage problems of zoonotic disease occurrence and finding solutions based on sound scientific research concepts and be committed to veterinary professional practice regulations and ethic as well the skills of writing and presentation of the scientific papers.
	research studies with applied impact.				
	b.7- Make a decision in dealing with variable professional practices.				√
Practical and professional skills	c.1-Identify the lesions of some selected zoonoses.	√	√	√	
	c.2-Master the collection, examination and identification of different specimens for various zoonotic agents.			√	
	c.3. Implement the up to date technology in the		√	√	

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		1-Supply the students with advanced information about the epidemiology and socio-economic impact of zoonotic diseases, diseases that are naturally transmitted between man and vertebrate animals and the most advanced methods for controlling zoonoses.	2- Be aware of current veterinary and public health zoonotic diseases and recent related approaches also recognize the recent techniques, principles and basics of his/her area of learning and other related scientific research.	3- Provide graduates the opportunity to master communication skills and skills of collection, management and analysis of the scientific data in the field of zoonoses.	4- Manage problems of zoonotic disease occurrence and finding solutions based on sound scientific research concepts and be committed to veterinary professional practice regulations and ethic as well the skills of writing and presentation of the scientific papers.
	collection, examination and identification of different specimens for various zoonotic agents.				
	c.4.Obtain the principles of good experimental design and analysis to their own research project.		√	√	
	c.5.Manage a research project in the field of Zoonoses concerning technical, ethical and safety issues and associated costs.			√	√
	c.6.Select and perform				

Program ILOs		Program aims			
		1-Supply the students with advanced information about the epidemiology and socio-economic impact of zoonotic diseases, diseases that are naturally transmitted between man and vertebrate animals and the most advanced methods for controlling zoonoses.	2- Be aware of current veterinary and public health zoonotic diseases and recent related approaches also recognize the recent techniques, principles and basics of his/her area of learning and other related scientific research.	3- Provide graduates the opportunity to master communication skills and skills of collection, management and analysis of the scientific data in the field of zoonoses.	4- Manage problems of zoonotic disease occurrence and finding solutions based on sound scientific research concepts and be committed to veterinary professional practice regulations and ethic as well the skills of writing and presentation of the scientific papers.
	relevant statistical analysis on data obtained for the running research.				
	c.7. Write professionally scientific paper and presentation.				√
General and transferable	dI- Master the skills of learning independently in preparation for own research.			√	

Program ILOs		Program aims			
		1-Supply the students with advanced information about the epidemiology and socio-economic impact of zoonotic diseases, diseases that are naturally transmitted between man and vertebrate animals and the most advanced methods for controlling zoonoses.	2- Be aware of current veterinary and public health zoonotic diseases and recent related approaches also recognize the recent techniques, principles and basics of his/her area of learning and other related scientific research.	3- Provide graduates the opportunity to master communication skills and skills of collection, management and analysis of the scientific data in the field of zoonoses.	4- Manage problems of zoonotic disease occurrence and finding solutions based on sound scientific research concepts and be committed to veterinary professional practice regulations and ethic as well the skills of writing and presentation of the scientific papers.
skills	d2-Present research finding in oral and written from using arrange of appropriate software (e.g., power point, word, excel and data base).			√	√
	d.3- Communicate effectively and use of information technology in the development of veterinary professional skills.			√	

Program ILOs		Program aims			
Program ILOS		1-Supply the students with advanced information about the epidemiology and socio-economic impact of zoonotic diseases, diseases that are naturally transmitted between man and vertebrate animals and the most advanced methods for controlling zoonoses.	2- Be aware of current veterinary and public health zoonotic diseases and recent related approaches also recognize the recent techniques, principles and basics of his/her area of learning and other related scientific research.	3- Provide graduates the opportunity to master communication skills and skills of collection, management and analysis of the scientific data in the field of zoonoses.	4- Manage problems of zoonotic disease occurrence and finding solutions based on sound scientific research concepts and be committed to veterinary professional practice regulations and ethic as well the skills of writing and presentation of the scientific papers.
	d.4- Mange time efficiently and work in research groups.			√	



Course specification of postgraduate

1-Basic information

Course Code:	PhD-ZOON 196
Course title :	Advanced Zoonoses
Program title:	PhD- Degree of Veterinary Science (Zoonoses)
Contact hours/ week	Lecture: 2 practical : 2 Total: 4
Approval Date	

B-Professional information:

1- Overall aims of the course:

- 1- To supply the graduate with most advanced information about the epidemiology, pathogenesis of zoonotic diseases.
- 2- To state the socioeconomic impact of emerging and re-emerging as well as transboundary zoonotic diseases and different advanced means for controlling zoonoses.
- 3- Provide graduates the opportunity to master the communication skills.
- 4- Enable graduates to gain competency with the most advanced laboratory technology.
- 4- Allow graduates to master practical skills in the research project.
- 5- Increase the ability of graduate to interact with scientific literature and to discuss and present the research data.

2- Intended learning outcomes of course (ILOs):

a- Knowledge and understanding:

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

- a.1. Recall knowledge about definition, etiology and occurrence of each zoonotic disease and specify the transmission mechanisms of zoonotic agents from the animals to man.
- a.2. State the factors necessary for emergency of infection of various zoonoses in human populations & delineate the advanced control strategies applicable to prevent the spread of zoonoses.



a..3. Understand the role played by the different species of domestic and wild animals and birds, the aquatic life, rodents and arthropod vectors in the emerging and reemerging of zoonotic diseases.

a.4. Realize the human diseases spread by animals and the role played by animals in such diseases & record information about the diseases previously considered to be exclusively human and recognized now to have their counterparts in wild animals.

b- Intellectual skills:

On successful completion of the course, the graduate should be able to:

b1- Deal with the research problems.

b2- Interpret their own research data and develop new approach to solving their research questions.

b3- Develop creative approaches to solving technical problems or issues associate with running researches project.

b4- Identify, summarize and evaluate prior researches finding in the area of study.

b.5. Differentiate the characteristic clinical picture of different zoonoses in the animal and human hosts.

b.6. Score the transboundary zoonotic diseases probably introduced from other countries and be aware of the measures of their prevention and eradication before being entrenched.

b.7. Interpret the specific problems of possible zoonotic origin via analysis of laboratory reports.

c- Professional and practical skills:

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

c1- Employ the principles of good experimental design and analysis to their own research project.

c2- Implement a relevant statistical analysis on data obtained for their own research.

c3- Practice the collection, examination and identification of different specimens for various zoonotic agents.

c4- Schedule the role of different species of rodents prevailing in the Egyptian environment in emerging of zoonotic disease and master various methods of control each species.

d- General and transferable skills:

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

-d.1. Use library facilities and internet technology.

-d.2. Manage time and work in group.

4-Topics and contents

Course	Topic	Week		No. of hours	Lectures	Practical
PhD-ZOON 196 Advanced Zoonoses (Lecture: 2 practical: 2 Total: 4)	-Advances in the introduction to zoonoses	1		2	1	-
	-Epidemiology of zoonoses and advances in epidemiological investigations.	2		4	1	1
	-Emerging zoonoses and factors of emergency.	3		4	1	1
	-General prevention and control of zoonose	4		4	1	1
	-Emerging bacterial Zoonoses transmitted from animal reservoirs (farm, pet animals) birds, fish	5,6,7,8,9		20	5	5
	-Rodents species prevailing in Egypt	10		6	1	2
	-Emerging diseases transmitted by rodents	11		4	1	1
	-Recent techniques for control of rodents.	12		4	1	1
	-Emerging bacterial food-poisoning	13		4	1	1
	-Factors associated with emergency of food poisoning.	14		4	1	1
PhD--ZOON 196 Advanced Zoonoses (Lecture: 2 practical: 2 Total: 4)	-Identification and recent classification of Rickettsial Zoonoses	15		4	1	1
	-Reckettsial zoonoses of importance in Egypt.	16,17		8	2	2
	-Human diseases spread by animals	18		4	1	1
	Emerging Viral Zoonoses	19,20,21,22,23,24		24	6	6
	Prion Diseases	25		4	1	1
PhD--ZOON 196 Advanced Zoonoses (Lecture: 2 practical: 2 Total: 4)	Advanced knowledge in parasitic Zoonoses					
	-Nematodiases	26,27		8	2	2
	-Cestodiases	28,29		8	2	2
	-Trematodiases	30,31		8	2	2
	-Potozoal Zoonoses	32,33		8	2	2



-Arthropod Zoonoses	34		4	1	1
Recent approaches in mycotic Zoonoses	35-36		8	2	2
Total			144	36	36

5-Teaching and learning methods

5.1- Lectures using board, data shows and multimedia

5.2- Self learning by preparing essays and presentations on specific titles to each group using computer researches and faculty library.

6-Teaching and learning methods for the students with disabilities

- Not applicable.

7-Student assessment

7.1. Assessments methods:

Method	Matrix alignment of the measured ILOs/ Assessments methods			
	K&U	I.S	P&P.S	G.S
Written Exam	a1,a2,a3,a4	b1,b2,b3,b4,b7		
Practical Exam			c1,c2,c3,c4	
Oral Exam	a1,a2,a3,a4	b5,b6		d1,d2

7.2. Assessment schedules/semester:

Method	Week(s)
Written exams	37 th
Oral Exam	37 th

7.3. Weight of assessments:

Assessment	Weight of assessment
Written exams	50
Practical exam	25
Oral Exam	25
	100

8- List of references

8.1. Notes and books



-Hand outs

8.2. Essential books:

-Understanding zoonotic diseases. (Romich, J.A) Thomson Delmar Learning, Australia, Brazil and USA. 2008.

-Zoonoses, Biology, Clinical Practice, and Public Health Control (Eds Palmer, S.R.; Soulsby, L. and Simpson, D.I.H.) Oxford Univ. Press, Oxford. 1998.

*These books are available in the library of Faculty of Veterinary Medicine, Beni-Suef.

8.3. Recommended books

- Public Health and Preventive Medicine (Eds Robert B. Wallace and Bradley N. Doebbeling) Appleton & Lange A. Simmon & Schuster, USA, 1993.

- Zoonoses (Ed Martin Shakespeare) 2nd Edition, Pharmaceutical Press, London, 2009.

*These books are available in the library of faculty of veterinary medicine.

8.4. Journals, Websites etc

Journals:

Zoonoses and public health

International journal of zoonoses

Vector-borne and zoonotic disease

Global Veterinaria

Journal of food science

Websites:

-<http://www.vetmed.wisc.edu/pbs/zoonoses/>

-<http://www.WHO.int/en/>

-<http://www.CDC.com/>

-<http://www.OIE.com>

Course Coordinators
Dr. Gihan Kamal eldin Abdel-latif

Head of Department
Prof. Dr. Mohamed Ali Ibrahim



Topic	Week	Intended learning outcomes of course (ILOs)			
		K&U (a)	I.S (b)	P.P.S (c)	G.T.S (d)
-Advances in the introduction to zoonoses	1	a1,a2	b1,b2,b3,b4	c1,c2	d1,d2
-Epidemiology of zoonoses and advances in epidemiological investigations.	2	a1,a2	b1,b2,b3,b4	c1,c2	d1,d2
-Emerging zoonoses and factors of emergency.	3	a1,a2	b1,b2,b3,b4	c1,c2	d1,d2
-General prevention and control of zoonose	4				
-Emerging bacterial Zoonoses transmitted from animals reservoirs (farm, pet animals) birds, fish	5,6,7,8,9	a 1, a 2, a 3	b5,b6,b7	c3	d1,d2
-Rodents species prevailing in Egypt	10	a 1, a 2	b5,b6,b7	c4	d1,d2
-Emerging diseases transmitted by rodents	11	a 1, a 2	b5,b6,b7	c4	d1,d2
-Recent techniques for control of rodents.	12	a 1, a 2	b5,b6,b7	c4	d1,d2
-Emerging food-poisoning zoonoses	13	a 1, a 2, a 3	b5,b6,b7	c3	d1,d2
-factors associated with emergency of food poisoning..	14			c3	d1,d2
-Identification and recent classification of Rickettsial Zoonoses	15	a 1, a 2, a 3	b5,b6,b7	c3	d1,d2
-diseases causes by rickettsia	16,17	a 1, a 2, a 3	b5,b6,b7	c3	d1,d2
-Human diseases spread by animals	18	a 1, a 2, a 4	b5,b6,b7	c3	d1,d2
Emerging viral Zoonoses	19,20,21,2	a 1, a 2, a3,a 4	b5,b6,b7	c3	d1,d2



	2,23,24				
Prion Diseases	25	a 1, a 2, a3,a 4	b5,b6,b7	c3	d1,d2
- Advanced knowledge in parasitic Zoonoses					
-Nematodiasis	26,27	a 1, a 2, a3,a 4a	b5,b6,b7	c3	d1,d2
-Cestodiasis	28,29	a 1, a 2, a3,a 4	b5,b6,b7	c3	d1,d2
-Trematodiasis	30,31	a 1, a 2, a3,a 4	b5,b6,b7	c3	d1,d2
-Protozoal Zoonoses	32,33	a 1, a 2, a3,a 4	b5,b6,b7	c3	d1,d2
-Arthropod Zoonoses	34	a 1, a 2, a3,a 4	b5,b6,b7	c3	d1,d2
Recent approaches in mycotic Zoonoses	35-36	a 1, a 2, a3,a 4	b5,b6,b7	c3	d1,d2



Course specification of postgraduate

1-Basic information

Course Code:	PhD-ZOON 197
Course title :	Role of rodents in transmission of Zoonoses
Program title:	PhD Degree in Veterinary Science (Zoonoses)
Contact hours/ week	Lecture: 2 practical : 2 Total: 4
Approval Date	

B-Professional information:

1- Overall aims of the program:

- 1-To provide advanced knowledge and skills about the nature of rodent-borne Zoonoses and their public health hazards and collects specimens of rodents prevalent in the Egyptian environment and identifies each type morphologically with demonstration of the various methods of rodent control.
- 2-Allow the graduates to master the opportunity to develop communication skills.
- 3-Enable graduates to acquire knowledge about the most advanced laboratory techniques.
- 4-Enable graduates to master their practical research experience.
- 5-Increase the ability of graduate to manage the scientific literature and to professionally review and present their own research data.

2- Intended learning outcomes of course (ILOs):

a- Knowledge and understanding:

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

- a1. Realize the nature of rodent-borne Zoonoses and their significance as a public health hazard.
- a.2. Familiarize species of rodents prevailing in the Egyptian environment.
- a.3. Discuss the factors necessary for producing rodent-borne zoonoses.
- a.4. Describe the emergency mechanisms of zoonotic agents from the rodents to man.
- a.5. Summarize the various modern techniques of rodent control.

b- Intellectual skills:

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



- b1- Deal with the research problems and questions.
- b2- Evaluate their own research data and develop new approach to solving their research questions
- b3- Express creative approaches to solving technical problems or issues associate with running researches.
- b4- compare, summarize and evaluate prior researches finding in a specific area
- b5- Interpret the lantern slides of some lesions of selected rodent-borne Zoonoses.
- b.6- Take decisions regarding the control strategies applicable to prevent the spread of rodent-borne Zoonoses.

c- Professional and practical skills:

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

- c1- Master the principles of good experimental design and analysis to their own research project.
- c2- Manage relevant statistical analysis on data obtained for their own research.
- c.3. Collect specimens of rodents prevailing in the Egyptian environment and identify each type morphologically with demonstration of the various methods of rodent control.
- c.4. Perform the research plan of his/her MVSc thesis.

d- General and transferable skills:

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

- d.1. Use library facilities and internet technology.
- d.2. Manage scientific meetings.

4-Topics and contents

Course	Topic	Week	No. of hours	Lectures	Practical
PhD-ZOON 197 Role of rodents in transmission of zoonoses (Lecture: 2)	-Rodent species and classification	1	4	1	1
	-Rodent behavior	2	4	1	1
	-Rodent species prevailing in Egypt	3	4	1	1
	-Economic losses caused by of rodent	4	4	1	1
	-Emerging bacterial Zoonoses transmitted by rodents	5,6,7,8,9,	20	5	5

	-Recent classification of Rickettsial Zoonoses	10		4	1	1
	-Reckettsial zoonoses transmitted by rodents.	11,12,13,14,15		20	5	5
	-Human diseases spread by rodents	16		4	1	1
PhD--ZOON 197 Role of rodents in transmission of zoonoses (Lecture: 2)	-Emerging viral Zoonoses transmitted by rodents	17,18,19,20,21,22		24	6	6
	Advanced knowledge on pathogenesis of emerging: -					
	-Nematodiasis transmitted by rodents	23,24		8	2	2
	-Cestodiasis transmitted by rodents	25,26		8	2	2
	-Trematodiasis transmitted by rodents	27,28		8	2	2
	-Potozoal Zoonoses transmitted by rodents	29,30,31		12	3	3
	Mycotic Zoonoses transmitted by rodents and their diagnosis and control	32,33,34		12	3	3
	Advanced techniques in rodent control	35-36		8	2	2
	Total			144	36	36

5-Teaching and learning methods

5.1- Lectures (brain storm, discussion) using board, data shows and multimedia

5.2- Self learning by preparing essays and presentations on specific titles on rodent borne zoonoses using computer researches and faculty library.

6-Teaching and learning methods for the students with disabilities

- Not applicable.

7-Student assessment

7.1. Assessments methods:

Method	Matrix alignment of the measured ILOs/ Assessments methods			
	K&U	LS	P&P.S	G.S
Written Exam	a1,a2, a3,a4,a5	b1,b2,b4		
Practical Exam			c1, c2, c3,c4	
Oral Exam		b3 ,b5,b6	c1,c2,c3,c4	d1,d2



7.2. Assessment schedules/semester:

Method	Week(s)
Written exams	37 th
Oral Exam	37 th

7.3. Weight of assessments:

Assessment	Weight of assessment
Written exams	50
Practical exam	25
Oral Exam	25
	100

8- List of references

8.1. Notes and books

-Hand outs

8.2. Essential books:

-Understanding zoonotic diseases. (Romich, J.A) Thomson Delmar Learning, Australia, Brazil and USA. 2008.

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8.4. Journals, Websites etc

Journals:

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Beni-Suef University
Faculty of Veterinary Medicine



Course Coordinators
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Head of Department
Prof. Dr. Mohamed Ali Ibrahim



B- Matrix alignment of the measured ILOs

Topic	Week	Intended learning outcomes of course (ILOs)			
		K&U (a)	I.S (b)	P.P.S (c)	G.T.S (d)
-Rodent species and classification	1	a1	b1,b2,b3,b4	c1	d1,d2
-Rodent behavior	2	a1.	b1,b2,b3,b4	c1	d1,d2
-Rodent species prevailing in Egypt	3	a2	b1,b2,b3,b4	c3	d1,d
-Economic losses caused by of rodent	4	a1	b1,b2,b3,b4	c2	d1,d2
-Emerging bacterial Zoonoses transmitted by rodents	5,6,7,8,9,	a 1, a 3, a4	b1,b2,b3,b4,b5	c2,c4	d1,d2
-Recent classification of Rickettsial Zoonoses	10	a 1	b1,b2,b3,b4,b5	c4	d1,d2
- Reckettisial zoonoses transmitted by rodents.	11,12,13, 14,15	a 1, a 3, a 4	b1,b2,b3,b4,b5	c2,c4	d1,d2
-Human diseases spread by animals	16	a 1, a 3, a 4	b1,b2,b3,b4,b5	c2,c4	d1,d2
-Emerging viral Zoonoses transmitted by rodents	17,18,19, 20,21,22	a 1, a 3, a 4	b1,b2,b3,b4,b5	c2,c4	d1,d2
Advanced knowledge on pathogenesis of emerging: -					
-Nematodiasis transmitted by rodents	23,24	a 1,, a3,a 4	b1,b2,b3,b4,b5	c2,c4	d1,d2
-Cestodiasis transmitted by rodents	25,26	a 1, a3,a 4	b1,b2,b3,b4,b5	c2,c4	d1,d2
-Trematodiasis transmitted by rodents	27,28	a 1, a3,a 4	b1,b2,b3,b4,b5	c2,c4	d1,d2
-Potozoal Zoonoses transmitted by rodents	29,30,31	a 1, a3,a 4	b1,b2,b3,b4,b5	c2,c4	d1,d2
Mycotic Zoonoses transmitted by rodents	32,33,34	a 1, a3,a 4	b1,b2,b3,b4,b5	c2,c4	d1,d2
Advanced techniques in rodent control	35-36	a1,a5	b6	c1,c2,c3,c4	d1,d2



Course specification of postgraduate

1-Basic information

Course Code:	PhD-ZOON 198
Course title :	Role of wild animals in transmission of zoonoses
Program title:	PhD Degree of Veterinary Science (Zoonoses)
Contact hours/ week	Lecture: 2 practical : 2 Total: 4
Approval Date	

B-Professional information:

1- Overall aims of the program:

- 1- Apply clear advanced information about the epidemiology, occurrence, socio-economic impact and how to control zoonoses acquired from wild animals.
- 2-Increase the opportunity of the graduate to develop communication skills.
- 3-Enable graduates to achieve skills in modern diagnostic laboratory techniques.
- 4- Allow graduates to develop practical research project.
- 5-Enrich the ability of graduate to create his scientific literature and to review and present their own research data.

2- Intended learning outcomes of course (ILOs):

a- Knowledge and understanding:

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

- a1. Provide recent knowledge about definition, etiology and occurrence of each zoonotic disease transmitted by wild animals.
- a.2. Describe the pathogenesis of zoonotic diseases from the wild animals to man.
- a.3. Recognize the factors necessary for producing infection by zoonoses of wild animal in human populations.
- a.4. Illustrate the control strategies applicable to prevent such zoonoses.
- a.5. Describe the role played by wild animals in the epidemiology of various zoonoses and methods of their diagnosis.

b- Intellectual skills:



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

- b1- Manage the research plane and problems.
- b2- Evaluate their own research data and develop new approach to solving their research questions
- b3- Develop creative approaches to solving technical problems or issues associate with running and researches project.
- b4- Identify, summarize and evaluate prior researches finding in a specific area
- b.5.Differentiate the characteristic clinical picture of wild animal zoonoses in humans.
- b.6. Score the role of wild animals in emergency of zoonotic diseases to Egypt.
- b.7. Write a report on laboratory findings to diagnose the specific problem of possible zoonotic origin.
- b.8. Demonstrate of the lantern slides of some lesions of selected Zoonoses.

c- Professional and practical skills:

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

- c1- Apply the principles of good experimental design and analysis to their own research project.
- c2- Select and perform relevant statistical analysis on data obtained for their own research.
- c.3. Prepare different specimens for various methods of examination and identification for the causative agent producing the disease

d- General and transferable skills:

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

- d.1.Use library facilities and internet technology.
- d.2. Manage scientific meetings.

4-Topics and contents

Course	Topic	Week	No. of hours	Lectures	Practical
PhD -ZOON 198 Role of wild animals in transmission of zoonoses (Lecture: 2	-Introduction to zoonotic diseases caused by wild animal species.	1,2	8	2	2
	-Role played by wild animals in emerging of zoonoses.	3	4	1	1
	-Economic losses caused by zoonotic diseases from wild animals.	4	4	1	1
	-Emerging Bacterial Zoonoses transmitted by wild animals and	5,6,7,8, 9,10	24	6	6

	advances in its pathogenesis					
	-Recent classification of Rickettsial Zoonoses	11		4	1	1
	-Emerging Reckettsial zoonoses transmitted by wild animals	12,13,14,15,16		20	5	5
	-Reverse zoonoses spread by wild animals	17,18,19		12	3	3
PhD- ZOON 198 Role of wild animals in transmission of zoonoses (Lecture: 2 practical: 2 Total: 4)	-Emerging viral Zoonoses transmitted by wild animals	20,21,22,23,24,25		24	6	6
	Advanced knowledge on:- -Nematodiasis transmitted by wild animals	26,27		8	2	2
	-Cestodiasis transmitted by wild animals	28,29		8	2	2
	-Trematodiasis transmitted by wild animals	30,31		8	2	2
	-Potozoal Zoonoses transmitted by wild animals	32,33		8	2	2
	Mycotic Zoonoses transmitted by wild animals	34-35		8	2	2
	Advanced techniques in control of emerging zoonoses transmitted by wild animals	36		4	1	1
Total			144	36	36	

5-Teaching and learning methods

5.1- Lectures using board, data shows and multimedia

5.2- Self learning by preparing essays and presentations on specific titles on rodent borne zoonoses using computer researches and faculty library.

6-Teaching and learning methods for the students with disabilities

- Not applicable.



7-Student assessment

7.1. Assessments methods:

Method	Matrix alignment of the measured ILOs/ Assessments methods			
	K&U	I.S	P&P.S	G.S
Written Exam	a1, a2,a3,a4,a5	b1, b4,b5		
Practical Exam			c1,c2,c3	
Oral Exam	a1,a2,a3,a4	b2,b3, b6,7,b8		d1,d2

7.2. Assessment schedules/semester:

Method	Week(s)
Written exams	37 th
Oral Exam	37 th

7.3. Weight of assessments:

Assessment	Weight of assessment
Written exams	50
Practical exam	25
Oral Exam	25
	100

8- List of references

8.1. Notes and books

-Hand outs

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8.4. Journals, Websites etc

Journals:

Zoonoses and public health

International journal of zoonoses



Beni-Suef University
Faculty of Veterinary Medicine



Vector-borne and zoonotic disease
Global Veterinaria
Journal of food science

Websites:

-<http://www.vetmed.wisc.edu/pbs/zoonoses/>

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B- Matrix alignment of the measured ILOs

Topic	Week	Intended learning outcomes of course (ILOs)			
		K&U (a)	I.S (b)	P.P.S (c)	G.T.S (d)
-Introduction to zoonotic diseases caused by wild animal species.	1,2	a1, a2, a3	b1,b5,b6	c2	d1,d2
-Role played by wild animals in emerging of zoonoses.	3	a1, a2, a3	b1,b5,b6	c2	d1,d2
-Economic losses caused by zoonotic diseases from wild animals.	4	a1, a2, a3	b1,b5,b6	c2	d1,d2
-Emerging bacterial Zoonoses transmitted by wild animals and advances in its pathogenesis	5,6,7,8,9,10	a 1, a 2, a3	b1,b2,b3,b4,b5,b6	c2,c4	d1,d2
-Recent classification of Rickettsial Zoonoses	11	a 1,a2,a3	b1,b2,b3,b4,b5,b6	c4	d1,d2
-Emerging Reckettsial zoonoses transmitted by wild animals	12,13,14,15,16	a 1, a 2, a3	b1,b2,b3,b4,b5,b6	c2,c4	d1,d2
-Reverse zoonoses spread by wild animals	17,18,19	a 1, a 2, a 3	b1,b2,b3,b4,b5,b6	c2,c4	d1,d2
-Emerging viral Zoonoses transmitted by wild animals	20,21,22,23,24,25	a 1, a 2, a 3	b1,b2,b3,b4,b5,b5	c2,c4	d1,d2
Advanced knowledge on:-		a 1,, a2,a 3	b1,b2,b3,b4,b5,b6	c2,c4	d1,d2
-Nematodiasis transmitted by wild animals	26,27	a 1, a2,a 3	b1,b2,b3,b4,b5,b6	c2,c4	d1,d2
-Cestodiasis transmitted by wild animals	28,29	a 1, a2,a 3	b1,b2,b3,b4,b5,b6	c2,c4	d1,d2
-Trematodiasis transmitted by wild animals	30,31	a 1, a2,a 3	b1,b2,b3,b4,b5,b6	c2,c4	d1,d2
-Potozoal Zoonoses transmitted by wild animals	32,33	a 1, a2,a 3	b1,b2,b3,b4,b5,b6	c2,c4	d1,d2
Mycotic Zoonoses transmitted by wild animals	34-35	a 1, a2,a 3	b1,b2,b3,b4,b5	c2,c4	d1,d2
Advanced techniques for control of emerging zoonoses transmitted by wild animals	36	a1,a5	b6	c1,c2,c3,c4	d1,d2