Fish Diseases (B)

Benha University   **Faculty of veterinary Medicine**
Course specifications
Program on which the course is given**: Bachelor of Veterinary Medical Sciences**
Department offering the course   **Department of Fish Diseases and Management**
Academic year / level   **5th year**
Date of specification approval: Ministerial decree No. 921 on 15/ 9/ 1987 (approved in this template by the Department Council on 30/9/2009)

A- Basic Information

Title : Fish diseases   Code : Vet00658b

Credit hours: Lecture: 1 hour

Tutorial: Practical: 2 hours

Total: 3 hours

B- Professional Information

1- Overall aims of course

The aim of the course is to provide basic information about management and control of the most prevailing fish diseases and to equip the students with appropriate clinical veterinary skills to assess risk and implement appropriate diagnosis, treatment and control measures.

2- Intended learning outcomes of the course (ILOs)

a- Knowledge and understanding

After successful completion of this course, the graduates should be able to:

   a1- Understand the principles of microbiology and microbial diseases as well as parasitology and parasitic diseases .
   a2- Recognize the fish health conditions.
   a3- Identify the causes of infectious fish diseases
   a4- Know the appropriate methods for diagnosis and differential diagnosis of fish diseases.
   a5- Understand the economic impact of fish diseases and methods available for prevention and control.

a5- Know the veterinary therapy and principles of their uses in aquaculture.

a6- Understand the ecological diseases and appropriate methods for
management and control.

B- Intellectual skills

After successful completion of this course, the graduates should be able to:

b1-Develop problem lists and differential diagnosis to reach to appropriate
solution and control of the clinical diseases.

b2- Familiarize to the changing demands of contemporary clinical veterinary
practice and committed to life-long learning.

b3- Create of problem solve approach.

b4-Criticize how data are collected and managed.

b5- Analyze the results obtained from their investigation and their value and
limitations.

C- Professional and practical skills

After successful completion of this course, the graduates should be able to:

C1- Use of more recent advanced and specialized identification techniques .

C2- Equip with specialized skills of laboratory and field samples collection and

processes.

c3- Perform emergency care to fish.

C4- Use appropriate safety procedure to protect themselves and co-workers.

C5- Write a communication report, case history.

C6-Conduct clinical examination on diseased fish and collect different samples.

C7- Demonstrate the risks and relevant factors promoting disease outbreaks, and
to implement an appropriate control strategy.

C7-Implement several strategies for control of fish diseases

D- General and transferable skills

After successful completion of this course, the graduates should be able to:

d1- Working with others, group work in the field trip.

d2-Communicate effectively with other relevant groups

d2- Utilize computers and internet skills, assay presentations

d2 – Search for new technological methods to solve emergency problem in fish
   farm as well as new disease outbreaks.

d3- Organize and Manage tasks as well as, adopt to work under pressure.

3- Contents:

Topic	No. of hours	Lecture	Tutorial / practical
1- Farm history	3	-	6
2- Disease cause by bacterial pathogen	5	6	-
3- Practical diagnosis of bacterial diseases.	6	-	6
4- Parasitic fish diseases	5	5	-
5- Practical diagnosis of parasitic diseases	6	-	6
6- Mycotic fish diseases	3	2	-
7- Practical diagnosis of fish mycotic diseases	6	-	6
8-Therapy and control of fish diseases	5	-	6
9-Ecological diseases	2	2	-
Total	**45**	**15**	**30**

3.1. ILOs Matrix

Topics	A) Knowledge and understanding	B) Intellectual skills	C) Practical skills	D) Transferable skills
Farm history	**a2,**	b4,b4,b5	C5	d1,d2,d3,d4,d5
Disease caused by bacterial pathogen	a1	-	c7	d1,d2,d3,d4,d5
Practical	a1,a3,a4	b1	c1,c2,c6	d1,d2,d3,d4,d5

diagnosis of bacterial diseases				
Parasitic fish diseases	a1	-	c7	d1,d2,d3,d4,d5
Practical diagnosis of parasitic diseases	a1,a3,a4	b1	c1,c2,c6	d1,d2,d3,d4,d5
Mycotic fish diseases	a1	-	c7	d1,d2,d3,d4,d5
Practical diagnosis of mycotic diseases	a1,a3,a4	b1	c1,c2,c6	d1,d2,d3,d4,d5
Therapy and control of fish diseases	a5	b1,b3	c3,c7,c8	d1,d2,d3,d4,d5
Ecological diseases	a6	b1	c7	d1,d2,d3,d4,d5

3.2. Assessment matrix:

	A) Knowledge and understanding	B) Intellectual skills	C) Practical skills	D) Transferable skills
1-Term work and field trip	√	√	√	√
2-Mid term examination	√	√	√	-
3-Final term examination	√	√	-	-
4-Oral examination	√	√	-	-
5-Practical work	√	√	√	-

4- Teaching and learning methods

4.1- lectures

4.2- Practical sessions

4.3-Small groups teaching

4.4-Field trips

4.5-Assays and seminars

5- Student assessment methods

5.1- Mid term examination to assess the understanding and follow up of the course.

5.2- Practical examination to assess the practical skills and how to diagnose, identify and control different fish diseases .

5.3- Term work: how to collect information about the diseased cases, and how to expect the cause and how to manage the case (field trip).

5.4- Written examination to assess the explanation and interpretation of fish diseases, epizootology, pathogenesis and control.

5.4- Oral examination

Assessment schedule

Assessment 1 mid term examination	Week 7
Assessment 2 practical examination	Week 13
Assessment 3 written examination	Week 15
Assessment 4 oral examination	Week 15
Assessment 5 Term work and field trip	Week 10

Weighting of assessment

Term work and field trip	5%
Mid term examination	5%
Final term examination	50%
Oral examination	20%
Practical work	20%
Other types of assessments	0
Total	100%

6- List of references

6.1- Course notes

- Notes on fish diseases part II.

- Practical notes on fish diseases Par II.

- Color atlas

6.2- Essential books (text books)

- Woo P.T.K. (1995) Fish diseases and disorders CAB international.

- Austin B. and Austin D. (1993) Bacterial fish pathogens, ELLis Horwood..

6.3- Recommended books

- Scha perclaus (1991 Fish diseases) BALKEMA/ROTTERDAM/BROOK field.

- PhelpsT.H, F.A.M.I,M.S and Bauer.A.B(1993) fish medicine. W.B. SAUNDERS campany.

7- Facilities required for teaching and learning

- Laboratory.

- Kits, media for isolation.

- Fishes

- Data show

- Computer

- Over head projector & color plates.

Web sites:

www.int-res.com/journals/dao/

Course coordinator

1- Professor Adel Shaheen   Prof. of Fish Diseases & Management

2- Professor Amany Abbass   Prof. of Fish Diseases & Management

Head of department: Prof. Adel Abd El-Aleem Shaheen

Date: