



Fish and Crustacean Diseases Course Specifications (2012 - 2013)

Program(s) on which the course is given: BVSc
Department offering the program: ---
Department offering the course: Poultry and Fish Diseases
Major or Minor element of programs: Major
Academic year /Level: 4th Year 2 Semesters
Date of specification approval:

A. BASIC INFORMATION

Title: Fish Diseases **Code:** AFIS, BFIS
Hours:

Lectures	hrs/week	Practical	hrs/week	Total	hrs
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B. PROFESSIONAL INFORMATION

١. Overall aims of the course:

Knowledge: about normal and diseases of freshwater , marine fish and crustacean

Skills: assisted control programs (controlled fish cultures programs. Diagnosis and prevention of fish crustacean disease.

٢. Intended Learning Outcomes (ILOs) of the Course:

a. Knowledge and Understanding:

- a^١ Normal and diseases of freshwater and marine fish as well as crustacean.
- a^٢ Programs for controlled fish diseases to increase production in cultured fish.
- a^٣ Knowledge and understanding of the normal macroscopic and microscopic structure of fish crustacean tissues and organs.
- a^٤ Knowledge and understanding of fish health maintenance and disease prevention
- a^٥ Knowledge and understanding of the scientific principles underlying laboratory diagnosis.
- a^٦ Knowledge and understanding epidemiology of fish and crustacean diseases.

b. Intellectual Skills:

- b^١ Analysis of clinical signs of diseases with requested laboratory diagnosis.
- b^٢ Creative thinking to control disease problems in freshwater and marine fish and crustacean.
- b^٣ Problem identification and solving measures for such diseases.
- b^٤ Apply appropriate quantitative and qualitative methodologies for prevention and control of fish and crustacean diseases.

- c. Professional and Practical Skills:** The graduate will be able to
- c¹ Handle and restrain fish in a welfare manner.
 - c² Obtain an accurate and relevant history of the individual fish or fish groups and their environment.
 - c³ Perform a thorough clinical examination.
 - c⁴ Collect, preserve and transport fish samples by applying standard practical laboratory techniques; interpret laboratory results by diagnostic aids, integrate those with clinical information.
 - c⁵ Assess the nutritional status of a fish and be able to advice on appropriate husbandry and feeding measures.
 - C⁶ Identify etiological agents and information relevant to a clinical problem with differential diagnosis.
 - C⁷ Demonstrate a practical ability to apply lesion knowledge of disease processes within the clinical signs, PM and environmental status.
 - C⁸ Advise on fish management and understand the importance of fish health economics in the context of acceptable fish welfare.

 - C⁹ Recognize treatment for diseased fish with life threatening conditions.
 - C¹⁰ Obtain and record data for prepare current and/or retrospective assessment and analysis of fish health and production record.
 - C¹¹ Understand how to minimize the risks of contamination, cross infection and predisposing factors leading to fish disease in the field.
 - C¹² Apply imaging techniques, and advise on their safe Use Interpret the results of imaging techniques in the pursuit of a diagnosis.
 - C¹³ Recognize the indications for treatment.
 - C¹⁴ Demonstrate an understanding of veterinary public health issues and the procedures to follow with notifiable and zoonotic diseases.
 - C¹⁵ Utilize appropriate safety procedures to protect clients and co-workers and self.
 - C¹⁶ Have a commitment to ongoing learning and self evaluation.
 - C¹⁷ the graduate recognize the most important and economic fish and crustacean diseases under Egyptian environment condition.

- d. General and Transferable Skills:** The graduate must be able to
- d¹ Conduct themselves in a professional manner with regard to the veterinarian's professional and legal responsibilities and understand and apply the ethical codes as set out in general organization of veterinary services (GOVS).
 - d² Work effectively as a member of a team in the delivery of services to community.
 - d³ Communicate effectively with the public, colleagues and appropriate authorities.
 - d⁴ Perform research on common disease problems in the surrounding domestic and wild fish in the community.
 - d⁵ Utilize communicating skills, have access to the internet and retrieve information.
 - d⁶ Demonstrate knowledge of the organization and management of veterinary practice; principles of certification, basic financial and accounting practices and record keeping.
 - d⁷ Perform research and solve any emerging disease problem.

3. Contents:

1 st Semester			
Topic	No. of hours	Lectures	Practical
Natural of fish diseases	2	2	--
Bacterial disease of fish	20	10	10

Bacterial disease of crustaceans	20	10	10
Mycotic disease of fresh and marine fish	18	8	10
2nd Semester			
Parasitic disease of fresh water fish	20	10	10
Parasitic disease of marine fish	8	4	4
Parasitic disease crustaceans	4	2	2
Non infective disease	8	4	4
Pollution	4	2	2
Viral diseases	12	6	6
Prevention and control of fish diseases	4	2	2
Total	120	60	60

4. Teaching and Learning Methods:

- 4.1 Lectures and practical of every topic in the course.
- 4.2 Collection of some information from text books.
- 4.3 Field visits (farms) Department laboratory.
- 4.4 Study of clinical cases in the department laboratory.

5. Student Assessment Methods:

Exam		
5.1	Written Mid-term	To assess the ability to understand and remember knowledge, and intellectual skills
5.2	Written Final-term	To assess the ability to understand and remember knowledge, and intellectual skills
5.3	Practical Final-term	To assess professional and practical skills
5.4	Oral Final-term	To assess skills of discussion

Assessment Schedule (in each semester):

	Exam	Week
Assessment 1	Written Mid-term	7 th
Assessment 2	Written Final-term	16 th
Assessment 3	Practical Final-term	15 th
Assessment 4	Oral Final-term	16 th

Weighing of assessments

	Exam	Per Semester (%)	Total (%)
Assessment 1	Written Mid-term	10	20
Assessment 2	Written Final-term	25	50
Assessment 3	Practical Final-term	10	20
Assessment 4	Oral Final-term	5	10
	Total	50	100

6. List of References:

6.1. Course Notes:

Departmental Notes By Prof. Dr. Magdy Khalil Soliman

6.2. Essential Books:

- Post (Fish Health), Bacterial fish disease
- Noga (Fish Medicine), parasitic diseases of marine fish

6.3. Recommended Books:

- Post book in Fish Health

6.4. Periodicals, websites, etc

Nothing

V. Facilities Required for Teaching and Learning

- Microscopes, computers (Personal and Notebook).
- Datashow and video films
- Audio and video aids, mobile screens for exhibition.

Course Coordinator: Prof.Dr. Magdy Khalil Soliman

Head of Department: Prof. Dr. Hany Ellakany

Date: