

## A- Basic Information

<b>Programme(s) on which the course is given:</b>	M.Sc. of Fish Biology & Aquatic Ecology
<b>Department responsible for offering the course:</b>	Zoology
<b>Department responsible for teaching the course:</b>	Zoology
<b>Academic year:</b>	2012-2013
<b>Course title and code:</b>	<b>Fish Physiology Z6114</b>
<b>Contact hours (credit hours):</b>	Lecture: 2 hrs      Practical: 2hrs Total: 3 hrs
<b>Course coordinator:</b>	Prof. M. F. F. Bayomy

## B- Professional Information

The course aim and intended learning outcomes are based on that mentioned in the programme specifications, with more course-related specific details.

### **1- Overall Aims of Course: By the end of this course, the student should be able to**

- \* Outline the coordination of the structure and function of this system in the fishes.
- \* Identify the different actions of hormonal secretion related to these glands in the fishes.

### **2- Intended Learning Outcomes of Course (ILOs):**

#### **a- Knowledge and Understanding:**

- a1- Define the types and classification of glands in the fishes.
- a2- List the types of hormones that secreted from these glands in the fishes.
- a3- Identify the structure and function of the reproductive system in the fishes.

#### **b- Intellectual Skills:**

- b1- Measure the student capability to identify the different endocrine glands and its related secretion.
- b2- Define the types of hormones and their mechanisms in the fishes.
- b3- Demonstrate structure and function of the reproductive system in the fishes.

#### **c- Professional and Practical Skills:**

- c1- Demonstrate skills in identification, characterization of different glands and their situations in the fishes.

c2- Distinguish between different hormones structure and functions in the fishes.

**d- General and Transferable Skills:**

d1- Measure the scientific writing ability.

d2- Utilize the oral communication skills.

d3- Use appropriate lab equipment.

d4- Use the appropriate technology such as (Internet) for scientific research.

**3- Course Contents**

Topic	No. of hours	Tutorial/ Practical	Lecture
Endocrine System	4	2	2
Types of glands	4	2	2
Types of Actions	6	3	1
Pituitary Gland	2	1	2
Thyroid and Parathyroid	2	1	2
Adrenal Gland	2	1	2
Gonadal hormones and Other Glands	2	1	4

**4- Teaching and Learning Methods**

- Lectures.
- Practical sessions.
- Research assignment.
- Oral presentation.

**5- Student Assessment Methods**

- Essays
- Oral exms
- Written exams.
- Practical exams.
- Quizzes.

### **Assessment schedule**

Assessment 1	Essay	Week 1 essay/term
Assessment 2	Oral exam	Twice/term
Assessment 3	Mid-term exams	Week 7
Assessment 4	Semester Work Exam	Week 10
Assessment 5	Final term exam	Week 14

### **Weighting of assessments**

Mid-term examination	20%
Final-term examination	40%
Oral examination	10%
Practical examination	20%
Semester work	10%
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Total	100%

### **6- List of references**

#### **1. Course Notes**

- 1- Internet and library material.
- 2- Handouts given separately during the course span.

#### **2. Essential Books (Text books):**

- a. Fish endocrinology (A. J. Matty).

#### **3. Periodicals, web sites,....,etc**

1. American Journal of Physiology.

### **7- Facilities required for teaching and learning**

- \*Lecture room provided with a white board.
- \* Dark room equipped with overhead and slide projectors, data show.
- \* Lab provided with suitable equipments.

**Course coordinator:** Prof. M. F. F. Bayomy

**Head of Department:** Prof. Saber Sakr

