



### Animal physiology

Course Code	Course Num.	Course Name	Credit Hours	Lec.	Lab	Tut	Prerequisites
BIO	314	Animal Physiology	4	3	2	0	BIO212

#### **Objectives:**

Animal physiology is the scientific study of the life-supporting properties, functions and processes of animals or their parts. The discipline covers key homeostatic processes, such as the regulation of temperature, blood flow and hormones.

By the end of this course, the student must be able :-

- To recognize the parts of the body which are linked into a whole functioning unit.
- To know gastrointestinal physiology and regulation of metabolism and energy balance.
- To define the homeostasis and feedback control.
- To outline cardiovascular physiology and respiratory system.
- To recall osmoregulation and excretion.
- To define the importance of endocrine glands and hormones which related to reproductive physiology.

#### **Syllabus:**

- Introduction to course, Basic Body Organization
- Homeostasis and Feedback Control
- Cellular Reactions and Metabolism
- Cellular Metabolism
- Gastrointestinal Physiology
- Regulation of Metabolism and Energy Balance
- Cardiovascular Physiology
- Respiratory System
- Control of Respiration
- Urinary System Kidneys and Fluid/Electrolyte Balance
- Muscle
- Muscular Control
- Cells of the Nervous System, NS organization
- Endocrine Glands and Hormones
- Reproductive Physiology

#### **References:**

- Moyes and P.M. Schulte. Principles of Animal Physiology 2<sup>nd</sup> Edt (2013). ISBN: 0-8053-5351-8
- Richard W. Hill , Gordon A. Wyse , Margaret Anderson, Animal Physiology, 3rd Edt, (2012), ISBN-10: 0878938982

