

# YEARLY OVERVIEW FOR IGCSE BIOLOGY

## FORM 3

# **TERM 3 TOPICS**

- (1)Classification
- (2)Cells
- (3) Movement in and out of Cells
- (4)Enzymes

## FORM 4

# **TERM 1 TOPICS**

- (1)Biological Molecules
- (2) Human Nutrition

Diet
Alimentary canal
Mechanical digestion
Chemical digestion
Absorption

(3)Plant nutrition

Photosynthesis

Leaf Structure

Mineral requirements



# (4)Transport in plants

Water transport in plants

Water uptake

Transpiration

Translocation

## **TERM 2 TOPICS**

(5) Transport in animals

Transport in animals

Heart

Blood and lymphatic vessels

Blood

- (6) Diseases and Immunity
- (7) Gaseous exchange in humans
- (8) Respiration

Aerobic respiration

Anaerobic respiration

(9) Excretion in humans

# **TERM 3 TOPICS**

(10) Coordination and response

Nervous control in humans

Sense organs

Hormones in humans

Homeostasis

Tropic responses



# (11) Drugs

Medicinal drugs

Misused drugs

## **FORM 5 TOPICS**

TERM 1

(12) Reproduction in humans

Sexual reproductive organs

Sex hormones in humans

Methods of birth control in humans

Sexually transmitted infections (STIs)

(13) Inheritance

Inheritance

Chromosomes, genes and proteins

Mitosis

Meiosis

Monohybrid inheritance

(14) Variation and Selection

Variation

Adaptive features

Selection



(15) Organisms and their Environment

**Energy flow** 

Food chains and food webs

**Nutrient cycles** 

Population size

## TERM 2

(16) Biotechnology and genetic engineering

Biotechnology and genetic engineering

Biotechnology

Genetic engineering

(17) Human influence on ecosystems

Food supply

Habitat destruction

**Pollution** 

Conservation

## TERM 3

Revision for the final examinations

# INTERNATIONAL SCHOOL OF SOUTH AFRICA

#### YEARLY OVERVIEW FOR AS BIOLOGY

#### **TERM 1 TOPICS**

- (1) BIOLOGICAL MOLECULES
  - (a) Water
  - (b) Carbohydrates
  - (c) Lipids
  - (d) Proteins
  - (e) Biochemical tests
  - (f) Nucleic Acids
  - (g) Enzymes
- (2) CELL STRUCTURE
  - (a) Cells and Microscopy
  - (b) Size and Magnification
  - (c) Plant and Animal Cells
  - (d) Bacteria
  - (e) Prokaryotes versus Eukaryotic Cell Structure
  - (f) Viruses
  - (g) Cell Membrane Structure and Function
  - (h) Transport across Membranes
  - (i) Mitotic Cycle
  - (j) DNA and Protein Synthesis

#### **TERM 2 TOPICS**

- (1) TRANSPORT IN PLANTS
  - (a) Plant Anatomy and Histology
  - (b) Transport of Water and Mineral Salts
  - (c) Transport of assimilates
- (2) TRANSPORT IN MAMMALS
  - (a) Mammalian heart
  - (b) Circulatory system
- (3) GAS EXCHANGE AND SMOKING



- (4) DISEASES AND PROTECTION AGAINST DISEASES
  - (a) Diseases and Smoking
  - (b) Infectious diseases
  - (c) Antibiotics
  - (d) Immunity

#### **TERM 3 TOPICS**

Revision for the final examinations.

#### YEARLY OVERVIEW FOR A- LEVEL BIOLOGY

## **TERM 1 TOPICS**

- (1) Energy and Respiration
- (2) Photosynthesis
- (3) Homeostasis
- (4) Control and Coordination
- (5) Planning, Analysis and Evaluation

#### **TERM 2 TOPICS**

- (1) Inherited Change
- (2) Selection and Evolution
- (3) Biodiversity, Classification and Conservation
- (4) GENETIC TECHNOLOGY

#### **TERM 3 TOPICS**

Revision for final examinations