



Biology Entrance Exam Guidelines

Description

This exam is designed for the students willing to enroll in the Faculty of Public Health and in the Faculty of Sciences at Jinan University. If the applicant passes the exam with at least 60% they can directly register the General Biology course required for their first year of study. If they fail the exam, they should register the Remedial Biology course to help them develop the fundamental concepts from the most elementary ideas of biology.

Contents

1. Reproduction

Male and female reproductive systems
Diploid and haploid cells
Meiosis
Spermatogenesis and oogenesis
Fertilization

2. Genetics

Hereditary traits and genes
Transmission of allelic genes
Inter and intrachromosomal recombination
Inheritance of genetic traits
Autosomal and sex-linked genes
Chromosomal abnormalities

3. Immunology

HLA and blood groups: self markers
The non-self
Cells of the immune system
Antigen recognition by B lymphocytes
Antigen recognition by T lymphocytes

4. Neurophysiology

Resting and action potential
Nerve impulse
Integration properties of the nerve impulse
Synapses, structure and function
Anatomy of the reflex action and reflex control
Neurotransmitters and membrane channels