

# **Syllabus of Prerequisite Knowledge**

## **for the MSc Programme in Wildlife Management Conservation and Control**

### **GENERAL SCIENCE**

Basic knowledge of Mathematics, Physics and Chemistry. Principles of Biochemistry.

### **ANATOMY / PHYSIOLOGY**

Basic knowledge of comparative vertebrate anatomy and animal physiology (in particular hormones' function and regulatory mechanisms, physiology of reproduction).

*At the beginning of the course in Biotechnologies Applied to Wildlife Reproduction, an entry test will evaluate the possess of the basic knowledge in general animal physiology and in the physiology of reproduction.*

### **MICROBIOLOGY**

Basic knowledge of viruses, bacteria, fungi.

### **ZOOLOGY / ECOLOGY**

Principles of animal biology, Linnean systematics, evolution, vertebrate zoology and ecology (definitions of population/ ecosystem, biotic and abiotic factors, life history traits, population dynamics, species interactions)

### **GENETICS**

Basic knowledge of genetics (meiosis, chromosomes and recombination; DNA structure, genes and genetic code; DNA replication, transcription and translation; mutations; Mendelian inheritance).

### **SOFT SKILLS**

Use of Microsoft Office package (Word, Excel, Power Point, Teams) and online search engines. Capacity to create electronic texts, create and edit datasheets, create slide presentations, edit images.