TOXICOLOGY OF CONTAMINANTS AND POISONINGS

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Course outline

2 CFU in total (1 CFU lectures and 1 CFU practical activities)

TRAINING OBJECTIVES

During the course, the basic principles of toxicology will be described, together with elements of toxicokinetics, toxicodynamics, mechanism of action of toxic substances, intoxication and poisoning in wildlife animals. The student will acquire skills on possible sources, methods of intoxication and diagnosis of the main cases of toxicosis related to the exposure of wildlife animals to environmental contaminants.

The course aims to encourage students:

•to extend their toxicological knowledge;

•to identify any danger of intoxication for wildlife animals;

PROGRAMME

Introduction to toxicology: general toxicology; toxicokinetics; toxicodynamics.

Special toxicology: classification of toxic substances (organochlorine, organophosphoric, carbamates, fungicides, herbicides, rodenticides, environmental pollutants, polycyclic aromatic hydrocarbons, polychlorinated biphenyls, endocrine disrupters).

Focus on: organochlorine pesticides, organophosphorus pesticides, carbamate pesticides, polychlorinated biphenyl, metals, nitrate and nitrite, poison baits.

The course will consist of lectures and practical training sessions.

During lectures, topics will be exposed in a critical and interactive way; during practical training sessions, students will apply the acquired theoretical knowledge;

Practical training sessions will focus on: intoxication with organophosphorus pesticides, nitrites assays, analytical methodologies used to extract and analyse a contaminant in a biological matrix.