

ACADEMIC	YEAR: 2016-2017

COURSE: Entomology and Zoology

TYPF	OF	FDI	ICATI	IONA	I ACTIVITY
ITPE					

TEACHER: Patrizia Falabella

e-mail: patrizia.falabella@unibas.it Web:

Phone: 0971 205501 mobile: 3204371225

Language: Italian

ECTS: 9 n. of hours: 56 Campus: Potenza Semester: I School: SAFE

tutorial/practice) Forestry and Environmental Science (L)

# **EDUCATIONAL GOALS AND EXPECTED LEARNING OUTCOMES**

Main objectives: learning about animal and insect classification, biology, morphology, anatomy and physiology behaviour and ecology reproduction, post embryonic development, ecology, insect pest management, QBS.

### **PREREQUIREMENTS**

- General and Inorganic Chemistry
- Genetics
- Organic Chemistry

# **SYLLABUS**

# ECTS-1:

Classification of animals, phylogeny and evolution; organization of animal body (symmetry, tissues, coelomic cavity); structural plan of the various animal phyla (with particular regard to nematodes, molluscs and arthropods); morphology of insects.

# ECTS-2:

Animal organisms functions (feeding and digestion, respiration, circulation, excretion, support and movement, nervous and hormonal coordination) with special reference to insects

### ECTS-3:

Reproduction and animal organisms embryonic and post-embryonic development, animal communication and society, with particular regard to insects.

### ECTS-4

Means of monitoring of the harmful organisms in animal agriculture.

### ECTS-5:

Understanding of the main characteristics of the Orders: Protura, Diplura, Thysanura, Collembola, Ephemeroptera, Odonata Blattoidea, Mantoidea, Isoptera

# ECTS-6:

Dermaptera, Orthoptera, Hemiptera, Thysanoptera, Neuroptera.

Understanding of the main characteristics of the Orders: Coleoptera, Diptera, Lepidoptera, Hymenoptera

# ECTS-7 (practice):

Acquisition of knowledge about the anatomy of the animals through the observation of zoological material



# ECTS-8 (practice):

Knowledge acquisition of the morphology and anatomy of adult insects and larvae through the observation of insects prepared dry or in alcohol, insects or parts of insects mounted on glass slides, models illustrating the morphology and anatomy of insects.

# ECTS-9 (practice):

Knowledge acquisition on the Orders of insects and the main harmful species, through the observation of dry insects, in alcohol, or slide.

#### **TEACHING METHODS**

Students could deepen into the different topics covered during the course through detailed observation of insects in entomological boxes and through single-topic seminars held outside lectures hours

# **EVALUATION METHODS**

Oral examination and Discussion of a project work.

### TEXTBOOKS AND ON-LINE EDUCATIONAL MATERIAL

- L. Masutti, S. Zangheri Entomologia generale e applicata. CEDAM
- E. Tremblay Entomologia applicata. Volume primo: generalità e mezzi di controllo
- P.J. Gullan P.S. Cranston Lineamenti di Entomologia Zanichelli
- Teaching material

### INTERACTIONS WITH STUDENTS

At the beginning of the course, after describing the objectives, the program and the methods of evaluation, the teacher will provide the material (lessons in Power Point, Scientific Articles). Simultaneously, a list of students who intend to enroll the course, together with name, serial number and email, will be drafted.

Office hours: on Tuesday and on Thursday from 15:30 to 16:30 in the teacher office. In addition to the weekly reception, the teacher will be available by e-mail or cell phone.

# **EXAMINATION SESSIONS (Forecast)**

See on the web site <a href="https://unibas.esse3.cineca.it/Home.do">https://unibas.esse3.cineca.it/Home.do</a>

# SEMINARS BY EXTERNAL EXPERTS YES

**FURTHER INFORMATION** 

PRESIDENT: Prof.ssa Patrizia Falabella COMPONENT: Prof. Paolo Fanti

COMPONENT: Prof.ssa Donatella Battaglia