# PARASITOLOGY (THIRD YEAR, SECOND SEMESTER)

**Number of transferable credits:** 4

**Discipline status**
Specialized discipline (optional)

**Course holder,**
**Associate professor dr. Olimpia IACOB**

**Subject objectives (lectures and labs)**

The course aims to acquire knowledge on morphological and taxonomic description of the parasites, receptive hosts, intermediate hosts and the parasitic life cycle; study of the factors involved in the emergence, evolution and development of parasites; intraspecific / interspecific relations and the relationships established between host-parasite-environment complex: between parasites and the environment, with implications for animals and humans.

The practical works aims to accommodate students with the laboratory and general workingtechniqueson studying the general characteristics of the parasitesclasses, morphological identification of the parasites species, parasites biology study; prevention of environmental pollution by parasitic elements.

**Discipline content (syllabus)**

| **Lectures (Chapters/subchapters)** |
|---|
| **Object of the study, history, general notions on parasites and parasitism.** Parasites adaptation to parasitic life. Inter- and intraspecific relations between host and parasite. Factors that determine parasites infestation. Ways of entering and leaving of the host by parasites. Parasitism types. Host reaction to parasites invasion. Host, host types. |
| **Protozoa**<br>Sarcodina class: *Entamoeba histolytica*<br>Flagellata class: *Trypanosoma gambiense, Giardia duodenalis, Tritrichomonas vaginalis;Tr. gallinarum*<br>Sporozoa class - *Eimeria spp., Toxoplasma gondii, Sarcocystis spp., Babesiaspp, Nosemaapis*;<br>Ciliophora class - *Balantidium coli,* |
| **Trematodes**<br>Trematoda class: *Fasciola hepatica, Dicrocoeliumlanceatum, Paramphistomumcervi, Opistorchisfelineus, Prosthogonimuscuneatus.* |
| **Cestodesşimetacestodes**<br>Cestoda class: *Diphyllobothriumlatum, Taeniasolium, T. saginata, Echinococcusgranulosus,,Multicepsmulticeps, Monieziaexpansa;*<br>**Metacestodes**:*Cysticercusspp, Coenurusspp, Hidatida*. |
| **Nematodesand Acantocephales.Nematoda**class:*Dictyocaulusspp,* Protostrongylidae,*Strongylusspp, A. suum, Oxyurisequi, Trichocephalus spp., Trichinella spiralis,*<br>**Acanthocephala**class*: Macracanthorhynchushirudinaceus* |
| Araneae, Heteroptera, Malophages, Anoplura, Diptera and Siphonaptera parasites in humans and animals.<br>**Arachnida**class,Acarina order:*Ixodesricinus, Argaspersicus, Dermanyssusgallinae, Sarcoptesscabiei, Notoedres spp. Psoroptesspp, Chorioptesbovis, Demodexcanis,* |

| |
|---|
| **Insecta**class<br>Mallophaga order:*Damaliniaspp, Trichodectescanis, Menopongallinae, Goniocotesgigas*;<br>Anoplura order:*Pediculus capitis, P. corporis, Phthirius pubis, Haematopinussuis.*<br>Siphonaptera order: *Pulexirritans, Ctenocephalidescanis* |
| Diptera order:Culicidae, Muscidae, Simulidae, Hippoboscidae, Tabanidae |

| **Practical works** |
|---|
| Presentation of the Parasitology laboratory; general instructions on labor protection; laboratory machines and equipments; laboratory working techniques. |
| Protozoa parasites: morphology, biology |
| Trematoda parasites: morphology, biology |
| Cestodes andmetacestodes:morphology, biology |
| Nematodaparasites: morphology, biology<br>Nematomorphes and Acantocephales: morphology, biology |
| Acarians: morphology, biology |
| Malophages insects, anoplura, siphonaptera: morphology, biology |
| Diptera insects: morphology, biology |
| Knowledge testing. |

## References


**IacobOlimpia** 2010 – Parazitologieşiclinicabolilorparazitare la animale – Helmintoze. Ed. "I.I. de la Brad Iaşi"

**IacobOlimpia** 2010 – Parazitologieşiclinicabolilorparazitare la animale – Helmintoze. Practicum parazitologic. Ed. "I.I. de la Brad Iaşi

**IacobOlimpia** 2002 - Parazitologieşiclinicabolilorparazitare – Protozooze. Ed. Terra Nostra, Iaşi

**Şuteu, I.,** 1999 – Zooparaziţiişigazdeleparazitare. Ed. Genesis Tipo, Cluj-Napoca

**Şuteu, I.,** 1996 – Zooparaziţiişimediulînconjurător, Ed. Genesis, Cluj-Napoca


## Final evaluation

| Evaluation | Evaluation type | Final mark percentage |
|---|---|---|
| Exam | Oral evaluation | 60% |
| Activity during semester | Oral evaluation throughout the entire semester;laboratory colloquium. | 40% |

## Contact person


Associate professor dr. Olimpia IACOB
8 MihailSadoveanu Alley, Iaşi, 700489, România
Telephone: 0040 232 407317, fax: 0040 232 219113
E-mail: oiacob@uaiasi.ro; iacobolimpia@yahoo.com