

Course name: Forensic entomology (USOS Code: B-BMED.2009Eng)

ECTS: 2

No. of hours: 30 (15 lectures + 15 classes)

Course coordinator: Dr hab. Ewa Pietrykowska-Tudruj, prof. UMCS

Prerequisites: Basic knowledge on arthropods

Course description: Lecture: Forensic entomology, state of knowledge, historical background, and precursors. Basics of morphology and anatomy, and selected topics in insect physiology. Biotic diversity and trophic preferences of entomofauna associated with decomposing human remains. Insect succession on carcasses and abiotic factors regulating its rate. Effects of xenobiotics and environmental factors on the development of medico-forensically important insect individuals. Determination of the time of death on the basis of entomological traces by developmental and successional methods. Development of Polish forensic entomology, current status, and future prospects.

Labs: Methods of collecting and preserving entomological material. Principles of preparation and preparation of entomological documentation. Determination and characterisation of insect orders associated with crimes and other aspects of the courts and judicial system. Flies (Diptera), identification on the basis of morphological characters of adult forms and larvae, biology and importance of the most important groups and key species for forensic science. Indicator species - laboratory and outdoor cultures, life cycles and developmental biology.

Recommended literature: Amendt J. Campobasso C.P., Goff M. L., Grassberger M. 2010. Current conceptions in Forensic Entomology. Springer; Byrd J.H., Castner J.L. 2010. Forensic entomology. The utility of Arthropods in legal investigation. CRC Press, Boca Raton-London-New York-Washington D.C., II ed., 418 ss.; Gennard D. 2012. Forensic Entomology, An Introduction. Wiley-Blackwell, II ed., 249 ss.; Smith K.G.V. 1986. A manual of forensic entomology. The trustees of the British Museum (Natural History), London, 205 ss.