

Numer modułu zgodnie z planem studiów	MOR S2_7/3
Field or fields of study	Plant Protection and Phytosanitary Control
Name of the training module	Sanitary Entomology
Language of instruction	English
Type of the training module (obligatory/optional)	optional
Level of the training module	Full-time studies II level
Year of study	I
Semester	1
Number of ECTS credits with a division into contact/noncontact	3 (1,6/1,4)
Title/degree, name and surname of the person in charge	Dr hab. Katarzyna Golan, associate prof.
Unit offering the subject	Plant Protection Department
Aim of the module	The aim of the course is to provide pest species related to the environment of human life, to know their biology, habitats and niches of their occurrence
Contents of the training module-a compact description of approx. 100 words	Characteristics of the main concepts and tasks of sanitary entomology. Sanitary entomology human history. Cockroaches - problems related to their occurrence, nuisance and control. Body louse, fleas - the risk of direct and transmitted diseases. Epidemiological role of flies, including mosquitoes. Buds, horseflies, midges. Ants - different species coming from outside. Hornets, wasps and other aculeata - a threat to human health. Other allergenic and parasitic arthropods (Bedbugs, Psocoptera, Argas sp. pigeons, ticks).
Recommended and obligatory reading list	<p>Recommended reading list</p> <ol style="list-style-type: none"> <li>1. Service M. 2012. Medical Entomology for Students. ISBN: 9781139416085</li> <li>2. Vector Control - Methods for Use by Individuals and Communities.</li> <li>3. World Health Organization. 1997. pp. 237–261.</li> <li>4. Pierce W. D. 2016. Sanitary Entomology PDF (<a href="https://booksinto.cf/articles/sanitary-entomology-pdf.html">https://booksinto.cf/articles/sanitary-entomology-pdf.html</a>) Cockroaches-Unhygienic scavengers in human settlements</li> </ol> <p>Obligatory reading list</p> <ol style="list-style-type: none"> <li>1. Benecke M. 2003: Owady w służbie Temidy. Świat Nauki, 8: 58-65.</li> <li>2. Błażejowski F. 1956: Chrząszcze trupożerne rezerwatu cisowego Wierzchlas. Zesz. nauk. UMK, Biol., 1: 63-90.</li> <li>3. <a href="http://www.who.int/water_sanitation_health/resources/vector288to301.pdf">http://www.who.int/water_sanitation_health/resources/vector288to301.pdf</a></li> <li>4. Khoso FN, Wong SK, Chia SL and Lau WH 2015. Assessment of non-biting synanthropic flies associated with fresh markets. Journal of Entomology and Zoology Studies; 3 (1): 13-20</li> <li>5. Xavier A.S., R. Barbosa R., Barbosa C.G., Carvalho Q.M.M. 2015. Bionomy of two flies of sanitary and forensic importance: Peckia (Sarcodexia) Lambens (Wiedemann) and</li> </ol>

	<p>Oxysarcodexia amorosa (Schiner) (Diptera, Sarcophagidae).Revista Brasileirade Entomologia 59; 229–233</p> <p>6. Recommended reading list</p> <p>7. Enayati, A. and Hemingway, J. 2010. Malaria Management: Past, Present, and Future. Annual Review of Entomology, Vol. 55, Issue. 1, p. 569.</p> <p>8. Journal of Medical Entomology. Oxford Academic</p> <p>9. <a href="https://academic.oup.com/jme/issue/58/6">https://academic.oup.com/jme/issue/58/6</a></p>
The intended forms/activities/teaching methods	<p>laboratory exercises - work cards for the current exercises, work with illustrative material, multimedia presentation, films themed team work, discussion, lecture - a multimedia presentation, video theme</p>