**Karta opisu zajęć (sylabus)**

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| Name of the field of study | Animal behavior |
| Module name | Synurbitic species of wild animals |
| Language of lecture | english |
| Module type | faculty |
| Study level | second-degree |
| Form of studies | stationary studies |
| Year of study for the field | I |
| A semester | 2 |
| Number of ECTS points divided into contact/non-contact | 3 (1,4/1,6) |
| Academic title/degree, name and surname of the person responsible for the module | dr hab. inż. Piotr Czyżowski  co-hosts: dr inż. Weronika Maślanko |
| The entity offering the module | Department of Ethology and Wildlife Management |
| Purpose of the module | As of January 1, 2023, there are 979 cities in Poland, occupying almost 2,240,000 hectares (more than 7% of the country's area). Since 2012, Poland's total area of cities has increased by about 80,000 hectares - more than 8,000 hectares per year. An increase in the area of cities is expected, resulting in the encroachment of urbanized areas into adjacent agricultural and forest areas, reduced natural habitats for animals and interrupted migration routes. At the same time, there is a steady increase in the populations of many wildlife species, including game species, for which urban and suburban areas are becoming increasingly attractive habitats. This causes increased conflict situations at the interface - the human economy and the functioning of wildlife populations - including traffic collisions involving animals, direct threats to human health and life, the development of zoonotic diseases, and increased damage to allotment sites and urban parks.  The purpose of the course is to learn about the processes of adaptation of wild animals to the urban environment, to learn about the factors affecting the adaptation of animals to urban life and to identify the risks associated with this phenomenon. |
| The learning outcomes for the module are a description of the knowledge, skills and social competences that the student will achieve after completing the classes. | Knowledge: |
| K1. The student lists and characterizes the differences in the behaviour of synurbial animals from the original populations. |
| K2. Knows the factors that characterize the urban environment, affecting the behaviour of animals. |
| K3. Knows the dangers caused by the existence of animals in the city. |
| Skills: |
| S1. The student can assess the level of welfare of synurban animals. |
| S2. The student can solve problems related to the existence of animals in urban areas. |
| Social competence: |
| Sc1. Willingly cooperates with authorities responsible for the protection of wildlife. |
| Prerequisites and additional requirements | The welfare of wild animals |
| Program content of the module | The subject touches on urban ecology, climatic factors in urban areas affecting the welfare and behaviour of wildlife (urban heat islands), differences in the behaviour of synurban animals about primary populations, problems of wildlife management in urban areas and mitigation of conflicts at the interface between human economy and the functioning of wildlife populations. Review of currently observed changes in animal behaviour in agglomerations. |
| List of basic and supplementary literature | 1. Dröscher V. B. 2001. Zachowania zwierząt: skuteczne strategie przetrwania.  Fakty - Grupa Wydawnicza Bertelsmann Media, Warszawa: 1-396. 2. Janczarek I., Karpiński M. (2019): Behawior zwierząt. Wyd. UP w Lublinie. 3. Sadowski B. Chmurzyński J.A. (1989): Biologiczne mechanizmy zachowania. PWRiL Warszawa. 1.  Reichholf  J. 1999. Żyją wśród nas: fauna i flora osiedli ludzkich. Świat Książki, Warszawa: 1-222. 4. Schilthuizen M. 2019. Ewolucja w miejskiej dżungli. Feeria Science, Łódź: 1-319. |
| Planned forms/activities/teaching methods | **Lectures** - in the form of multimedia presentations  **Exercises**  -in the form of multimedia presentations  -presentation of projects by students  -discussion |
| Methods of verification and forms of documenting achieved learning outcomes | W1 - test  W2 - test  W3 - test  U1 - *discussion/group work*  U2 - project assessment  K1: *discussion/group work*  DOCUMENTATION OF LEARNING EFFECTS achieved in the form of tests - archived in paper or digital form (depending on the form of execution), presentations archived in digital form, project archived in paper or digital form (depending on the form of elaboration), participation in discussions recorded together with the attendance list - archived in paper form.  ***Criteria used for evaluation*** 3.0 - student shows a sufficient degree of knowledge or skills, obtains from 51 to 60% of the sum of points determining the maximum level of knowledge or skills in the subject, 3.5 - a student shows a sufficient plus degree of knowledge or skills when he / she obtains 61 to 70% of the sum of points determining the maximum level of knowledge or skills in the subject, 4.0 - the student shows good mastery of knowledge or skills, obtaining from 71 to 80% of the sum of points determining the maximum level of knowledge or skills in the subject, 4.5 - the student shows a good level of knowledge or skills, obtaining from 81 to 90% of the sum of points determining the maximum level of knowledge or skills in the subject, 5.0 - the student masters a very good range of knowledge or skills, obtaining above 91% of the sum of points determining the maximum level of knowledge or skills in the subject. |
| Elements and weights affecting the final grade | Test - 70% impact on the evaluation  Project - 20% of the impact on the grade  Participation in discussion - 10% of the impact on the grade. |
| Balance of ECTS points | **Contact (hrs/ECTS):**  lectures - 14/0.56  audit exercises- 5/0.20  laboratory exercises- 10/0.40  consultations- 5/0.20  credit -1/0.04  **total contact - 35/1.4**  **Non-contact (hrs/ECTS):**  preparation for exercises-10/0.40  studying the literature-10/0.40  project preparation-10/0.40  preparation for the pass-10/0.40  **total non-contact - 40/1.6** |
| Workload related to classes requiring the direct participation of an academic teacher | lectures – 15 h.,  exercises – 15 h.,  consultations - 5 h.,  test - 1 h.,  **total** 36 h./1,4 ECTS |
| Relating modular learning outcomes to directional learning outcomes | W1– BZ2\_W01  W2– BZ2\_W01  W3– BZ2\_W01  U1- BZ1\_U01  U2- BZ1\_U01  K1 - BZ1\_K02 |