

# **Ornamental fish diseases**

ECTS: 1.00

### SUBJECT MATTER CONTENT

#### CLASSES

Description of the environmental conditions and the principles of fish selection in various types of aquariums as well as the presentation of the most frequently kept species of aquarium fish. The technical conditions used in aquaristics will be discussed, as well as the possibility of performing veterinary treatments, clinical examination and sectioning of aquarium fish as well as the possibility of performing tests using non-invasive methods (cytology, X-ray). Presentation of the basic therapeutic methods.

#### LECTURE

Topics including: biology of selected groups of fish, with particular emphasis on differences resulting from a different anatomy and living environment, infectious diseases (viral, bacterial, fungal), diseases resulting from inappropriate environmental conditions, parasitic diseases. Description of the latest achievements in the field of therapy of these diseases.

### **TEACHING OBJECTIVE**

Knowledge of general biology, physiology and microbiology. Basic knowledge of fish diseases

DESCRIPTION OF THE LEARNING OUTCOMES OF THE COURSE IN RELATION TO THE DESCRIPTION OF THE CHARACTERISTICS OF THE SECOND LEVEL LEARNING OUTCOMES FOR QUALIFICATIONS AT LEVELS 6-8 OF THE POLISH QUALIFICATION FRAMEWORK IN RELATION TO THE SCIENTIFIC DISCIPLINES AND THE EFFECTS FOR FIELDS OF STUDY:

Symbols for outcomes related to the discipline:

R/WA\_P7S+++

Symbols for outcomes related to the field of study:

A.W17. +, A.W10. +, B.U5. +, K.5+, A.U14. +, B.W3. +, B.U3. +, B.U13. +, B.W6. +, K.9.+, B.W4. +, K.8.+, B.W5. +

## LEARNING OUTCOMES:

### Knowledge:

W1 – Knows and understands: basic concepts in the field of biology of various species of aquarium fish, principles of fish breeding in freshwater and marine aquariums, issues related to the anatomy and physiology of selected species of aquarium fish. The student understands the importance of environmental and nutritional requirements of selected species of aquarium fish, knows the mechanisms of the emergence and spread of infectious and environmental diseases. He knows the rules of prevention and treatment of aquarium fish diseases.

#### Skills:

U1 - Is able to: conduct basic diagnostic tests, analyze changes in fish behavior and the results of clinical examination of selected species of aquarium fish. Analyzes the

Legal acts specifying learning outcomes: 682/2020 Disciplines: Veterinary science Status of the course: Fakultatywny Group of courses:B - przedmioty kierunkowe Code: ISCED 0841 Field of study: Veterinary Medicine Scope of education: Profile of education: General academic Form of studies: full-time Level of studies: uniform master's studies Year/semester: 4/8

Types of classes: Lecture, Classes, Practical classes Number of hours in semester:Lecture: 5.00, Classes: 8.00, Practical classes: 2.00 Language of instruction: Polish Introductory subject: Presentation of basic issues concerning health problems in aquarium fish. The student will acquire the skills to conduct basic diagnostic tests and to analyze the obtained results. necessary to make therapeutic decisions. Prerequisites: biology, physiology, microbiology, fish diseases

Name of the organisational unit conducting the course:Katedra Epizootiologii Person responsible for the realization of the course:dr wet. Joanna Pajdak-Czaus e-mail: joanna.pajdak@uwm.edu.pl

Additional remarks:

relationship between the environment and aquatic organisms. The student is able to apply the appropriate treatment. The student can prepare clear case reports and keep documentation in accordance with applicable regulations, in a form that is understandable to both the owners of the animal and other veterinarians. He can advise the owner on setting up an aquarium and caring for aquarium fish.

### Social competence:

K1 – The student is ready to: see the health problems of ornamental fish in aquarium conditions and assess the effectiveness of the implemented treatment. The student is ready to deepen the acquired knowledge through additional training and review of the available literature. He is ready to share the acquired knowledge with aquarium owners and colleagues.

## TEACHING FORMS AND METHODS:

Lecture(W1;U1;K1;):multimedia presentation, discussion Practical classes(U1;):Clinical examination of ornamental fish

## FORM AND CONDITIONS OF VERIFYING LEARNING OUTCOMES:

Lecture (Oral test) - In order to pass this course, it is necessary to obtain not less than 65% of the possible points. The grading is based on the score thresholds described in the faculty procedure "Principles of grading students". The student may attempt to improve the credit score twice. In the event of lock-down and the necessity of online learning, the methods of verifying the achievement of learning outcomes declared in the syllabus, i.e. the forms of passing the exam and exercises, may change in a manner appropriate to the situation. - Classes (Oral test) - In order to pass this course, it is necessary to obtain not less than 65% of the possible points. The grading is based on the score thresholds described in the faculty procedure "Principles of grading students". The student may attempt to improve the credit score twice. In the event of lock-down and the necessity of online learning, the methods of verifying the achievement of learning outcomes declared in the syllabus, i.e. the forms of passing the exam and exercises, may change in a manner appropriate to improve the credit score twice. In the event of lock-down and the necessity of online learning, the methods of verifying the achievement of learning outcomes declared in the syllabus, i.e. the forms of passing the exam and exercises, may change in a manner appropriate to the situation. - Practical classes (Evaluation of the work and cooperation in the group) - Evaluation of executed clinical examination -

## **BASIC LITERATURE:**

1. Baumgartner R., Gabrisch K., *Praktyka kliniczna: zwierzęta egzotyczne: ssaki, ptaki i zwierzęta zmiennocieplne*, Wyd. Galaktyka, R. 2009

Mitchell M.A., Tully T.N., *Zwierzęta egzotyczne*, Wyd. Edra Urban Partner, R. 2019
Antychowicz J., *Choroby ryb akwariowych: śródlądowych i morskich*, Wyd. Powszechne Wydawnictwo Rolnicze i Leśne, R. 2007

## SUPPLEMENTARY LITERATURE:

1. Lewbart G.A., Ornamental fishes and aquatic invertebrates: self-assessment color review, Wyd. CRC Press, R. 2016

 Roberts H.E., Fundamentals of ornamental fish health, Wyd. Wiley-Blackwell, R. 2010
Bassleer G., Diseases in marine aquarium fish. Cause – Symptoms – Treatment, Wyd. Hollywood Import Export Inc., R. 2004