Study Programme : MSc in Biology

Degree level: Master degree

Course Title: ICHTHYOLOGY

Professor: Desanka Kostić, PhD

Required/Elective Course: Elective Course

Number of ECTS: 6

Prerequisites: /

Course Objective:

Students will get acquainted with the anatomy, physiology, systematics, and ecology of fish, non-native fish, as well as with biology of economically important species of fish. Furthermore, the goal is getting acquainted with reproduction, embryo and larvae fish development, hybridization, and the importance of fish as saprobiological indicators.

Course Outcome:

Student will acquire theoretical and practical knowledge necessary for the work in fishing and related institutions.

Course Content:

Theoretical part

Systems of organs in fish; Selected chapters from physiology; Systematics; Ichthyofauna of Serbia; Fossil fish remains; Acclimatization; Non-native species and their presence in the open waters of the Pannonia basin in Serbia; Economically important species and their presence in the open waters of the Pannonia basin in Serbia; Influence of abiotic ecological factors on fish; Biotic relationships among fish; Division of fish according to the place of settling; Migrations; Diet; Growth; Genetics; Ontogenetic evolution; Hybridization; Fish as saprobiological indicator.

Practical part

Skin, skeletal, and digestion systems; Measurable and morphometric characters of fish, statistical analysis; Overview of the ichthyologic collections; Blood count; Determination of age, absolute and relative increase in population; Absolute and relative fertility; Diet; Calculation of well-fed coefficient, statistical analysis; Determination of saprobic index based on the structure of ichthyofauna

Seminars

Writing and presenting seminar papers from above mentioned areas

Reading List:

Kostić, D., Maletin, S..: Osnovi opšte ihtiologije Autorizovana skripta

Grginčević, M., Pujin, V. (1998): Hidrobiologija. Ekološki pokret grada Novom Sada.

Jevtić, J., (1989): Život slatkovodnih vrsta riba. Naučna knjiga. Beograd.

Soldatović, B., Zimonjić, D. (1988): Biologija i gajenje riba. Naučna knjiga. Beograd.

Bojčić i sar., (1982): Slatkovodno ribarstvo. Ribozajednica Zagreb, Jugoslovenska medicinska naklada. Zagreb.

Ćirković, M., Jovanović, B., Maletin, S. (2002): Ribarstvo. Univerzitet u Novom Sadu, Poljoprivredni fakultet. Simonović, P. (2001): Ribe Srbije.

Kostić, D. (2005): Osnovi zoologije hordata. Studio Veris. Novi Sad

Kostić, D. (2005): Osnovi uporedne anatomije i sistematike hordata. Skripta. Studio Veris. Novi Sad.

Total hours:					
Lectures: 2	Practicals:	Other: 2	Student research work:		
			5		

Methods of instruction:

Theoretical: Oral presentation with the help of the most up to date technology, active participation of the students *Practical*: Microscope slides, dissections, work in laboratory

Assessment (maximum number of points 100)					
Requirements	points	Final exam	points 40		
•	60		•		
Active participation in lectures		Practical exam	40		
Active participation in practicals		Oral exam			
Test(s) or					
Pre-exam testing	60				