Course title Biologia ogólna/General biology	**ECTS code** 13.3.0391

| **Name of unit administrating study** Faculty of Chemistry | |

Studies			
Field of study	**Type**	**Form**	
Chemistry	Bachelor	Full-time studies	

Teaching staff
Dr hab. Piotr Rutkowski

Forms of classes, the realization and number of hours	**ECTS credits**
A. Forms of classes, in accordance with the UG Rector's regulations lecture	30 h - classes 10 h – tutorial classes 35 h – student's own work TOTAL: 75 h - 3 ECTS
B. The realization of activities In-class learning	
C. Number of hours lecture 30 h	

The academic cycle
2019/2020 winter semester

Type of course obligatory	**Language of instruction** Polish

Teaching methods Problem lecture	**Form and method of assessment and basic criteria for evaluation or examination requirements**
	A. Final evaluation, in accordance with the UG study regulations Exam
	B. Assessment methods Written exam (longer written statement/solution to problem) Written exam with the open questions (tasks).
	The basic criteria for evaluation • The exam includes lecture material • A written exam, in the form of a test is evaluated according to the percentage indicator in accordance with the terms and conditions of the UG " • Oral exam-The evaluation shall include the degree of exhaustion of the topic for each of the 3 randomized questions

Required courses and introductory requirements
   A. Formal requirements none
   B. Prerequisites none

Aims of education
Introduction of basic and key issues of biology – Understanding the basics of living organisms and their relationships. Introduction of basic concepts and definitions of general-physiological – necessary for the further learning process.
Familiarize yourself with the most important techniques and research tools in the field of biology necessary to carry out your own research work.

Course contents

The rise and evolution of life. Life in genetic and molecular level. Energetic basics of life processes. Introduction to Cell biology. The systematics of living organisms. The diversity of the living world at the quality and ecosystem level, its threats and conservation methods.

Rules for the division of systematic organisms, selected groups of organisms. Introduction to biology development, biochemical and physiological basics of the functioning of organisms. Adaptation of species to different habitats and environmental conditions. Fundamentals of ecology.

Bibliography of literature

Literature required to pass the course

Alberts B. "Podstawy Biologii Komórki" 1999. PWN.

Allison L. "Podstawy biologii molekularnej" 2009. Wydawnictwo Uniwersytetu Warszawskiego.

Berg J., Tymoczko J., Stryer L. "Biochemia" 2007. PWN.

Combes C. "Ekologia i ewolucja pasożytnictwa" 1999. Wydawnictwo Naukowe PWN.

Coyne J. "Ewolucja jest faktem" 2009. Prószyński & S-ka.

Dzik J. "Dzieje życia na Ziemi" 2008. PWN.

Freeland J. "Ekologia molekularna" 2008. Wydawnictwo Naukowe PWN.

Jurd. "Biologia zwierząt. Krótkie wykłady" 2006. PWN.

Kalata G. "Koln - Dolly była pierwsza" 2000. Prószyński & S-ka.

Krebs Ch. "Ekologia" 2011. PWN.

Mackenzie, Ball, Virdee "Ekologia. Krótkie wykłady" 2007. PWN.

Stinger Ch., McKie R. "Afrykński exodus" 1999. Prószyński & S-ka.

Szwejkowska A., Szwejkowski J. "Botanika T.1,2." 2006. PWN.

Turner, Mc Lennan, Bates, White "Biologia molekularna. Krótkie wykłady" 2007. PWN.

Twyman "Biologia rozwoju. Krótkie wykłady" 2005. PWN.

Willson E. "Socjobilogia" 2000. Zysk i S-ka.

White M., Gribbin J. "Darwin - żywot uczonego" 1998. Prószyński & S-ka.

Zuk M. "Seks na sześciu nogach" 2012. Prószyński & S-ka.

Knowledge

Student:
Knows and understands the basic concepts, laws and definitions on which biology is based, apply and disseminate the principles of interpreting biological phenomena and processes in research work and practical activities,- recognizes research problems with which require the use of advanced research tools.