UNIVERSITY OF BIAŁYSTOK

FACULTY OF EDUCATION

ACADEMIC YEAR 2021/2022

Course: **Basics of coding in early childhood education**	**ECTS Points:** 2

Course Code: 0800-ERA-7GWO	
Language: English	
Course description: educational content – elective, optional course	
Lecturer: Adam Naruszewicz, MA.	

Semester: summer	**Number of hours:** 15
	Lecture: 0
	Classes: 15

Courses to be completed before enrolment to the course: Expert knowledge of computer skills is required.

Substantive content: basics of computer programming, computer games in education, developing children's coding skills.

Classes	Number of hours
• What is a coding in early education	2
• Base of computer programming	2
• Elements of programming in early childhood education	3
• Computer games and applications for learning coding	4
• Robots in early childhood education	3
• Summary	1

Aim of the course: Developing students' knowledge and skills in terms of conducting classes about coding in early childhood education. Showing methods and tools for developing coding skills in children.

Teaching methods: work in teams (groups), work in computer room (lab), presentations and instructional videos.

Literature:
- Alghamdi M, Al-Jumeily D, Hussain A, "Supporting Young Students to Learn Computer Programming in an Early Schooling", In Computer Vision and Image Analysis Applications (ICCVIA), International Conference, pp. 1-5. IEEE, Rome, Italy, 23rd-24th March 2015.
- Alghamdi M, Symons A, Al-Jumeily D, Hussain A, "Supporting the Learning of Computer Programming in Early Years Schooling". The International Journal of Software Engineering, vol.3, pp.1-11, 30th June 2015.

Forms and conditions of credit: active participation in classes.