Course Title	M. Tomasello theory of the evolution of language and communication
Learning and numer of hours	Seminar, 30 hours
Study period	6
Level	**Cognitive science of communication, first-degree**
ECTS Points	5
Language	English
Prerequsities	Basic knowledge from the field of linguistics and formal and informal logic

Course objectives

This course aim is to familiarize students with the work of Michael Tomasello, in which he develops an account of the mechanisms that underlie the uniquely human forms of cognition and behaviour (language, cooperation, culture), as well as provide an explanation as to how and why those forms emerged in the course of evolution.
The main part of the course will consist of systematic analysis of the books "Why We Cooperate" and "A Natural History of Human Thinking" by M. Tomasello. In addition, students will have the opportunity to familiarize with important concepts in the field of cognitive and evolutionary sciences that form the basis of Tomasello's view.

Course content

1. Uniquely human forms of cognitive activity
2. Forms of intentionality
3. Cooperative behaviour: helping, informing and sharing
4. The emergence of social instituitions
5. Evolution of human cognition

Learning outcomes

Knowledge	1. Requrements and grading system: Student is required to participate in discussion during class. Final grade is determined by essay and oral exam. 2. Student recognizes and explains thesis and arguments that pertain to the concepts and theories discussed during the seminar which 3. Studens knows and characterizes types of communication and functions of language that pertain to the concepts and theories discussed during the seminar.
Skills	1. Student names and lists the principles that govern effective language interaction, including the exchange of scientific information. 2. The student independently defines the objectives of his development and plans an individual learning path.
Competence	1. The student prepares a short research paper on a topic specified by the teacher, and publishes and disseminates its results using online tools. 2. The student recognizes the motives and goals of other people's communication activities and sets the criteria and procedures for successful communicative interactions 3. The student appreciates the importance of knowledge pertaining to language communication mechanisms for the organization of effective team cooperation, willingly uses his expert knowledge to explain the cognitive and cultural conditions of communicative acts.
Requirements and grading system	Active participation at seminar, passing of the oral exam and completion of written assignment

Literature

Tomasello, M. (2009). Why we cooperate. MIT press.
Tomasello, M. (2018). A natural history of human thinking. Harvard University Press.
Tomasello, M. (2011). Human culture in evolutionary perspective. Advances in culture and psychology, 1, 5-51.
Tomasello, M., Carpenter, M., Call, J., Behne, T., & Moll, H. (2005). Understanding and sharing intentions: The origins of cultural cognition. Behavioral and brain sciences, 28(5), 675-691.
Call, J., & Tomasello, M. (2008). Does the chimpanzee have a theory of mind? 30 years later. Trends in cognitive sciences, 12(5), 187-192.
Crockford, C., Wittig, R. M., Mundry, R., & Zuberbühler, K. (2012). Wild chimpanzees inform ignorant group members of danger. Current Biology, 22(2), 142-146.

Name of the teacher and contact	

Curriculum title: **USWH-KK-O-I-S-19/20Z**	
Course title: Python – basics	
Name of the field of study: Cognitive science of communication	
Mode and cycle of study: first-degree, full time	Profile of study: general academic
Course/ module status: obligatory	Language of instruction (%): English (100%)

Year	Semester	Format of instruction	No. of hours	type of credit	ECTS
2	3	lab	60	pg	7
TOTAL:			60		7

Course / module coordinator:	Dr. Malgorzata Wrzosek
Course instructor:	Dr. Malgorzata Wrzosek
Course / module objectives:	The aim of the course is to provide students with knowledge of the basics of programming in Python, acquisition of ability to create simple programs for cognitive experiments, and developing an attitude of readiness to design own programming solutions for simple cognitive problems..
Prerequisites:	*No prior knowledge is necessary.*

LEARNING OUTCOMES

Category	No.	Code	Description	Ref. to programme benchmark
Knowledge	1	EP1	defines the place of programming in cognitive science, indicates potential applications of programming in research designed for understanding, modeling and testing the cognitive functioning	K_W01, K_W06
	2	EP2	knows and understands the principles of preparation of programming code, including the ethical aspect of the use of the work of other authors	K_W12, K_W13
Skills	1	EP3	searches for solutions for programming problems in the internet, visits the forums programming to obtain information dispelling doubts arising in the course of developing the own code	K_U01 K_U02 K_U15
	2	EP4	can effectively find his place in work on the group code	K_U13
Social competences	1	EP5	is ready to estimate their own programming knowledge	K_K01
	2	EP6	manifests an attitude of openness to programming solutions other than their own and in case of difficulties readiness to change their strategy in the light of expert opinions	K_K02 K_K03 K_K11

CONTENT	Semester	No. of hours
Course:**Python - basics**		
Format of instruction: **laboratory**		
1 Introduction to Python, programming in cognitive science, principles of clean and correct coding.		2
2.Types of variables, operations on strings, input-output operations, function input ().		4
3. Conditional instructions *if*.		4
4. *For* and *while* loops.		4

5. Matrix types 1 – tuples.		4
6. Matrix types 2 – lists.		4
7. Matrix types 3 – dictionaries.		4
8. Operations on files.		4
9. Functions.		8
10. Graphical User Interface – working with the GUI.		10
11. Classes.		8
12. Group project.		4

Modes of delivery					
Assessment methods	Software methods using a computer		No. of learning outcome from the syllabus		
	Project		**EP1,EP2,EP3,EP4,EP5,EP6**		
Grading criteria	To obtain credit for the course student has to collect at least 50% points for all projects prepared during classes. The final grade will be based on points obtained during the semester for projects performed in class, calculated according to the following scale: 90% - 5.0, 80% - 4.5, 70% - 4, 60% - 3.5, 50% - 3.				
Final grading computation	Sem.	Subject	Type of credit	Grade calc. method	Weight for the average
	3	Python basics	Credit with a grade	Not calculated	-
Basic reading	Dawson, M. (2010): Programming for the Absolute Beginner, 3rd Edition, Course Technology: Boston				
Supplementary reading	.Lutz, M. (2013): Learning Python.5th Edition, O'Reilly Media: Canada				

STUDENT WORKLOAD	
	No. of hours
Contact hours	**60**
Participation in test / exam	**0**
Preparation for contact hours	**30**
Private reading and studying	**10**
Participation in tutorials	**10**
Preparation of project / essay / etc.	**15**
Preparation for test / exam	**0**
Other	**0**
TOTAL workload	**125**
ECTS credits	7

COURSE TITLE :	Modeling and simulation of cognitive and communication processes *(Modelowanie i symulacja procesów poznawczych i komunikacyjnych)*
LEARNING FORMAT AND NUMBER OF HOURS	*Lectures and laboratories, 45h*
STUDY PERIOD:	*spring semester*
LEVEL	*master*
ECTS POINTS	*5*
LANGUAGE	*English*
PREREQUISITES	*General knowledge about cognitive and communication processes.*

COURSE OBJECTIVES

The aim of the course is to familiarize students with the issues of modeling and simulation of cognitive and communication processes. Preparing students to use computer simulation methods in modeling cognitive and communication processes.

COURSE CONTENT

Lecture:

1. Introduction to modeling and simulation of cognitive and communication processes
2. The essence of process modeling. Procedure for modeling cognitive and communication processes
3. Evaluation of models of cognitive and communication processes. Limitations of formalization of cognitive models and unifying models (theories)
4. Basic definitions and concepts in the field of computer simulation in the description of cognitive and communication processes. Stages of preparing a simulation model
5. Review of methods and tools for computer modeling and simulation of cognitive and communication processes – similarities and differences
6. Evaluation of achieved educational effects – a written test

Laboratory:

1. Acquisition of ability to work in simulation package environment
2. Constructing and solving simulation models of exemplary processes in a computer simulation package: case studies and practical tasks.
3. Completion of a group model of a simulation model
4. Evaluation of achieved educational effects – project presentation

LEARNING OUTCOMES - student

knowledge	1. distinguishes and characterizes types of structures, institutions and social ties relevant from modeling and simulation of cognitive and communication processes point of view 2. lists and characterizes the methods and techniques of modeling and simulation of cognitive and communication processes used in cognitive science, recognizes their advantages and limitations
skills	1. chooses methods and techniques of modeling and simulation of cognitive and communication processes appropriate for a particular

	research situation 2. constructs research hypotheses regarding the course of cognitive and communication processes, and then verifies them using modeling and simulations techniques 3. constructs models and simulations of cognitive and communication processes using techniques and methods used in interdisciplinary cognitive science research
social competences	1. is cautious and critical in formulating opinions on social issues, appreciates expert opinions based on the results of scientific simulations and modeling of social processes 2. appreciates the need to use modern modeling and simulation techniques in research and projects of social importance 3. works independently, willingly engages in activities related to the simulation and modeling of social processes for the implementation of their own or team research tasks
REQUIREMENTS AND GRADING SYSTEM.	The condition of obtaining credit for lectures is to obtain at least 60% points for written test. The condition of obtaining credit for laboratories is to obtain positive grades for (a) practical tasks and (b) group project. The final grade of the course results from the arithmetic mean of all grades obtained for lectures and laboratories.
LITERATURE	
A. Borshchev: The Big Book of Simulation Modeling. Multimethod Modeling with AnyLogic, AnyLogic North America 2013. J.D. Sterman: Business Dynamics: Systems Thinking and Modeling for a Complex World. McGraw-Hill/Irwin 2000. P. O. Siebers, U. Aickelin: Introduction To Multi-Agent Simulation, University of Nottingham, http://arxiv.org/ftp/arxiv/papers/0803/0803.3905.pdf.	
NAME OF THE TEACHER AND CONTACT	*dr Agata Wawrzyniak* *agata.wawrzyniak@usz.edu.pl*

COURSE TITLE :	Python in cognitive science – basics *(Python w badaniu procesów poznawczych)* **przedmiot do wyboru, moduł „Nowe trendy w naukach o poznaniu”*
LEARNING FORMAT AND NUMBER OF HOURS	*Exercises, 30h*
STUDY PERIOD:	*spring semester*
LEVEL	*master*
ECTS POINTS	*5*
LANGUAGE	*English*
PREREQUISITES	*No prior knowledge is necessary.*

COURSE OBJECTIVES

The aim of the course is to provide students with knowledge of the basics of programming in Python, acquisition of ability to create simple programs for cognitive experiments, and developing an attitude of readiness to design own programming solutions for simple cognitive problems.

COURSE CONTENT

1. Introduction to Python, programming in cognitive science, principles of clean and correct coding.
2. Types of variables, operations on strings, input-output operations, function input ().
3. Conditional instructions *if*.
4. *For* and *while* loops.
5. Matrix types 1 – tuples.
6. Matrix types 2 – lists.
7. Matrix types 3 – dictionaries.
8. Operations on files.
9. Functions.
10. Graphical User Interface – working with the GUI.
11. Classes.
12. Group project.

LEARNING OUTCOMES - student	
knowledge	1. defines the place of programming in cognitive science, indicates potential applications of programming in research designed for understanding, modeling and testing the cognitive functioning 2. knows and understands the principles of preparation of programming code, including the ethical aspect of the use of the work of other authors
skills	1. searches for solutions for programming problems in the internet, visits the forums programming to obtain information dispelling doubts arising in the course of developing the own code 2. can effectively find his place in work on the group code
social competences	1. is ready to estimate their own programming knowledge 2. manifests an attitude of openness to programming solutions other than

	their own and in case of difficulties readiness to change their strategy in the light of expert opinions
REQUIREMENTS AND GRADING SYSTEM.	The condition of obtaining credit for the course is to obtain at least 50% points for all projects prepared during classes. The final grade will be based on points obtained during the semester for projects made in class, calculated according to the percentage scale.
LITERATURE	
Lutz, M. (2013): Learning Python.5th Edition, O'Reilly Media: Canada Dawson, M. (2010): Programming for the Absolute Beginner, 3rd Edition, Course Technology: Boston	
NAME OF THE TEACHER AND CONTACT	*Dr Małgorzata Wrzosek* *malgorzata.wrzosek@usz.edu.pl*