Prowadzący	**Artur Kuter**
Oferta PJO*	TAK / ~~NIE**~~
Oferta PJOE*	~~TAK~~ / NIE**
Kierunek, rok, stopień dla PJO (*obowiązkowe)	
Semestr roku 2022/2023	zimowy / letni**

* PJO – przedmiot w języku obcym dla studentów polskich / PJOE – przedmiot w języku obcym dla studentów Erasmus+

** zostawić właściwe

BASIC INFORMATION ABOUT THE SUBJECT (INDEPENDENT OF THE CYCLE)

Module name	NoSQL DataBases
Erasmus code	
ISCED code	
Language of instruction	English
Website	https://www.umcs.pl/en/courses-in-english-2021-2022,21582.htm (dla PJOE)
Prerequisites	Requirements in the area of: - basic knowledge of IT
ECTS points hour equivalents	Contact hours (work with an academic teacher): Total number of hours with an academic teacher: 45h (15 hours of lectures + 30 hours of exercises) Number of ECTS points with an academic teacher: Non-contact hours (students' own work): Total number of non-contact hours: Number of ECTS points for non-contact hours: Total number of ECTS points for the module:
Educational outcomes verification methods	Test, preparation of a complete IT project, classroom activities, classroom discussion
Description	On this subject, we will learn what non-relational databases are. What mechanisms are used in this type of databases. Why such databases are becoming more and more popular. What are they used for. What are the advantages and disadvantages of using this type of database.
Reading list	n/a
Educational outcomes	KNOWLEDGE The student will gain knowledge in the field of non-relational databases, the possibilities of their use and building such data sets. SKILLS The student will be able to create a database. It will use key parameters such as key-value pair, wide column, graph, or document. ATTITUDES 1. The student will gain knowledge when and how to use non-relational databases.
Practice	n/a

INFORMATION ABOUT CLASSES IN THE CYCLE

Website	https://www.umcs.pl/en/courses-in-english,21103.htm (dla PJOE)
Educational outcomes verification methods	Test, preparation of a complete IT project, classroom activities, classroom discussion.
Comments	
Reading list	n/a
Educational outcomes	KNOWLEDGE The student will gain knowledge in the field of non-relational databases, the possibilities of their use and building such data sets. SKILLS The student will be able to create a database. It will use key parameters such as key-value pair, wide column, graph, or document. ATTITUDES The student will gain knowledge when and how to use non-relational databases.
A list of topics	• What is NoSQL and what are the gaps between relational databases and NoSQL databases • We will learn the 4 main types of NoSQL database • Each topic will be discussed on the basis of Definition - Explanation - Example - Exercise • We will finish the course with two projects related to the use of NoSQL databases
Teaching methods	Lectures, including multimedia presentations, case studies.
Assessment methods	1. **General requirements:** Students are requested to complete required readings and prepare for lectures before attending. Three hours of outside self-study is recommended for each hour of class and counseling time. 2. **Lecture attendance:** Students have to arrive on time to class, stay the entirety of the class and keep absences to a minimum. I expect to be informed beforehand if you need to miss a class. To encourage this policy, a student who is not present in class more than one time will not be grade for course based on "collection of the points" but based on final exam. 3. **Counseling:** Individual or small group volunteer access to the lecture. It is the responsibility of the student to seek help and ask questions when concepts presented in lecture or the textbook are not clear. However, if the student encounters the decline in scores, a counseling meeting may be initiated by the lecturer. 4. **Exams:** A series of short exercises are required to make up the total course grade – only for the students who attended the classes (one absence is acceptable). These exercises would be available for students during the whole course: lecture and e-learning module. Student collects

the points which will be given for solving exercises, and at the end of course an appropriate grade would be given. Grades for course are setup according to the following scale:

Points	Grade
Below 50	2.0 / F (Fail)
50 - 60	3.0 / E (Sufficient)
61 - 70	3.5 / D (Satisfactory)
71 - 80	4.0 / C (Good)
81 - 90	4.5 / B (Very good)
91 - 100	5/ A (Excellent)

Students who fail to collect a sufficient number of points or for those who has more than one absence, can attempt one time to pass that exam (counseling meetings), however there will be no "makeup" of exams if students receive grade 3.0 / E (Sufficient) or higher. Cheating is not acceptable in any form. Any evidence of cheating in exams will lead to annulling the grade and disciplinary procedure. Exams may include material from all reading assignments, all lectures, and all assignments. Grades for exam are setup according to the following scale:

%	Grade
Below 50	2.0 / F (Fail)
50 - 60	3.0 / E (Sufficient)
61 - 70	3.5 / D (Satisfactory)
71 - 80	4.0 / C (Good)
81 - 90	4.5 / B (Very good)
91 - 100	5.0 / A (Excellent)