DESCRIPTION OF THE COURSE OF STUDY

Course code		
Name of the course in	Polish	**Historia nauki**
	English	**History of science**

1. **LOCATION OF THE COURSE OF STUDY** within the system of studies

1.1. Field of study	Data engineering
1.2. Mode of study	stationary
1.3. Level of study	1st degree
1.4. Profile of study*	General academic
1.5. Person/s preparing the course description	Monika Biernacka
1.6. Contact	bmonika@ujk.edu.pl

2. **GENERAL CHARACTERISTICS OF THE** course of study

2.1. Language of instruction	english
2.2. Prerequisites*	none

3. **DETAILED CHARACTERISTICS OF THE COURSE OF STUDY**

3.1. **Form of classes**		lectures
3.2. **Place of classes**		Classes in the teaching room of the UJK
3.3. **Form of assessment**		presentation
3.4. **Teaching methods**		Presentation, discussion
3.5. **Bibliography**	**Required reading**	1. Ch. Van Doren, Historia wiedzy, Wydawnictwo al. Fine, Warszawa 1996 2. W. Bynum, Krótka historia nauki, Wydawnictwo RM, Warszawa 2016
	Further reading	1. A.K. Wróblewski, Historia Fizyki, Wydawnictwo PWN, Warszawa 2006 2. K. Rejmer, Zapomniana historia nauki, Wydawnictwo PWN, Warszawa 2017

4. **OBJECTIVES, SYLLABUS CONTENT AND INTENDED LEARNING OUTCOMES**

4.1. **Course objectives** ***(including form of classes)***

C1. Showing how science has developed over the centuries, how its method have evolved, how concepts have changed

C2. Indicating the most important , breakthrough moments in the history of science

C3. Showing how modern science is rooted in its history

4.2. **Detailed syllabus** ***(including form of classes)***

Lectures

The beginnings of science and the development of basic concepts. The most important achievements of antiquity—mathematics and Greek natural philosophy. The decline of the Middle Ages, the advent of the Renaissance, and geographical conquests. The birth and development of universities. The Copernican breakthrough, Kepler, Galileo, Descartes. Empiricism and rationalism. Newton and the development of the scientific method. The relationship between science and technology. Darwin and evolutionism. The triumphs of 19th-century science. The birth of a new physics—quantum mechanics and the theory of relativity. Cosmology. The atomic bomb and the conquest of space. Computers and the internet. Genetic engineering and cloning.

4.3 Intended learning outcomes

Code	**A student, who passed the course**	**Relation to learning outcomes**
within the scope of **KNOWLEDGE:**		

W01	Knows basic facts from the history of science	ID1A_W11
W02	He knows the most important figures in the history of science	ID1A_W11
within the scope of **ABILITIES:**		
U01	Can point out breakthrough moments in the history of science	ID1A_U11
U02	Understands the evolutionary nature of science	ID1A_U11
within the scope of **SOCIAL COMPETENCE:**		
K01	Is aware of the enormous role of science in the modern world	ID1A_K03

4.4. **Methods of assessment of the intended learning outcomes**

Teaching outcomes *(code)*	**Method of assessment (+/-)**		
	presentation		
	Form of classes		
	L	*C*	.. .
W01	**+**		
W02	**+**		
U01	**+**		
U02	**+**		
K01	**+**		

****delete as appropriate***

4.5. **Criteria of assessment of the intended learning outcomes**

Form of classes	**Grade**	**Criterion of assessment**
lecture (L) (including e-learning)	**3**	Achievement <50 - 60) % of the requirements used in the assessment methods
	3,5	Achievement <60 - 70) % of the requirements used in the assessment methods
	4	Achievement <70 - 80) % of the requirements used in the assessment methods
	4,5	Achievement <80 - 90) % of the requirements used in the assessment methods
	5	Achievement <90 - 100) % of the requirements used in the assessment methods

5. BALANCE OF ECTS CREDITS – STUDENT'S WORK INPUT

Category	**Student's workload**	
	Full-time studies	**Extramural studies**
NUMBER OF HOURS WITH THE DIRECT PARTICIPATION OF THE TEACHER /CONTACT HOURS/	***30***	
*Participation in lectures**	***30***	
INDEPENDENT WORK OF THE STUDENT/NON-CONTACT HOURS/		
*Preparation for the lecture**	***10***	
Preparation of multimedia presentation	***10***	
TOTAL NUMBER OF HOURS	***50***	
ECTS credits for the course of study	**2**	

****delete as appropriate***

Accepted for execution *(date and legible signatures of the teachers running the course in the given academic year)*

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