

**SUBJECT SYLABUS - DOCTORAL SCHOOL  
THE EDUCATION CYCLE FROM 2021 TO 2025**

<b>GENERAL INFORMATION ON THE SUBJECT</b>				
Subject title		<b>Scientific Research Methodology</b>		
Name of the unit carrying out the subject		<b>Doctoral School at Rzeszów University</b>		
Subject type ( <i>compulsory, optional</i> )		compulsory		
year / semester		Year I, winter semester		
Discipline		archaeology		
language of lecture		Polish		
Name and surname of the course coordinator		Prof. dr hab. Sławomir Kadrow		
Name and surname of the person conducting the course (s)		Prof. dr hab. Sławomir Kadrow		
Prerequisites		General knowledge of the theory of archeology and natural, social and human sciences.		
<b>SUBJECT SUMMARY</b> <b>(synthetic description of the content and objectives of the subject; 100-200 words)</b>				
<p>The subject presents the basics of the methodology of natural, social and human sciences. Highlighting the specificity of the humanities and natural sciences and drawing attention to their main ways of knowing: understanding and explaining, respectively. The hypothetical-deductive method as the basis of explanation in the natural sciences and hermeneutics as the main tool of understanding in the humanities. In the field of archeology, it presents in detail the main theoretical schools in historical terms (evolutionism, cultural and historical school, functionalism, processism, post-processism, neo-Darwinism, etc., globalization, cultural memory, the "Histoire Croisée" perspective). Discussion of the tendencies towards the scientification of archeology (formalization, computerization, quantification, mathematical modeling, big data). The aim is to: provide knowledge about the theoretical foundations, paradigms and selected specific issues in the field of archeology; outlining the development trends of archeology, acquiring the ability to disseminate the results of scientific activity.</p>				
<b>LEARNING OUTCOMES FOR THE SUBJECT AND VERIFICATION METHODS</b>				
Learning effect symbol	Assumed learning outcomes	Reference to Learning Outcomes for qualifications at PRK Level 8 (symbol)	Form of didactic classes (lectures, exercise, etc.)	Verification methods (e.g. colloquium, oral exam, written exam, project etc.)
<b>Knowledge No.</b>				
1.	The doctoral student knows and understands to the extent that it is possible to revise the existing paradigms - world achievements, covering theoretical foundations as well as general issues and selected specific issues - appropriate for a scientific or artistic discipline	<b>P8S-WG/1</b>	lectures, exercise	oral exam
2.	The doctoral student knows and understands the main development trends of the scientific or artistic disciplines in which the education takes place	<b>P8S-WG/2</b>	lectures, exercise	oral exam
3.	PhD student knows and understands the methodology of scientific research	<b>P8S-WG/3</b>	lectures, exercise	oral exam
4.	The doctoral student knows and understands the principles of disseminating the results of scientific activity, also in the open access mode	<b>P8S-WG/4</b>	lectures, exercise	oral exam

<b>Skills No.</b>				
1.	PhD student is able to: - use knowledge from various fields of science or art for creative identification and innovative solving of complex problems or performing research tasks, in particular: - define the aim and subject of research, formulate a research hypothesis, - develop methods, techniques and research tools and use them creatively, - make conclusions on the basis of scientific research	<b>P8S-UW/1</b>	exercise	project
<b>Social competence No.</b>				

#### FORMS OF TEACHING COURSES, DIMENSION OF HOURS AND POINTS

Semester (No.)	Lecture	Exercise/ seminar	Laboratory	practice	other	Number of ECTS credits
I	10	20	—	—	—	0

#### TEACHING METHODS

Lectures with a multimedia presentation, discussion and explanation of the issues by the lecturer. Classes - PhD students' work on reading selected works on the theory of archeology, critical analysis of examples, discussion with the participation of the teacher and work on the project.

#### PROGRAM CONTENT

##### **Lecture/Seminar:**

1. Basics of the methodology of natural sciences (Descartes), social sciences (Habermas) and humanities (Gadamer) in historical terms - 2 hours.
2. Methodological characteristics of the main trends in the development of archeology: (a) processualism, (b) post-processualism - 2 hours.
3. Characteristics of the newest methodological trends in scientific archeology: (a) neo-Darwinism, (b) archeometry, (c) quantification, (d) elements of mathematical modeling - 2 hours.
4. Characteristics of the latest methodological trends in social and humanistic archeology: (a) globalization, (b) cultural memory, (c) the perspective of "Histoire Croisée" - 2 hours.
5. Discussion on some methodological hand-books – 2 hours.

##### **Exercises/seminars/other:**

1. critical analysis of 1 article in the field of scientific archeology, plus work on the project – 7 hours.
2. Critical analysis of 1 article in the field of social archaeology, plus work on the project – 7 hours.

3. Critical analysis of 1 article in the field of historical archaeology, plus work on the project – 7 hours.	
<b>CONDITIONS FOR ACCESSING THE COURSE (ASSESSMENT CRITERIA)</b>	
Lecture (mastering the knowledge in the thematic scope of the lectures) - examination and credit Classes - credit with assessment (active work on a critical analysis of 3 selected works and on a project). A doctoral student receives a grade 5 in the exam when he has full knowledge of the subject of the lecture. The grade 4 is awarded to a doctoral student when he or she has not mastered the knowledge of one of the required methodologies. Grade 3 is awarded to a doctoral student when he demonstrates knowledge of at least half of the methodology and methodological tendencies. Grade 2, when the doctoral student does not meet the above-mentioned criteria.	
<b>TOTAL DOCTORAL WORK EXPENDITURE NEEDED TO ACHIEVE THE OBJECTED EFFECTS IN HOURS AND ECTS CREDITS</b>	
Form of activity	Average number of hours to complete the activity
Hours realized in direct contact resulting from the study plan	Lectures – 10 hours Exercises – 20 hours = 30 hours
Others with the participation of the teacher (participation in consultations, examination)	5 hours
Hours realized independently by the doctoral student (preparation for classes, examinations, writing a paper, etc.)	Preparation for exercises - 30 hours Preparation for the exam and project execution - 115 hours
<b>All hours</b>	150
<b>TOTAL NUMBER OF ECTS CREDITS</b>	0
<b>LITERATURE</b>	
Basic literature	<ol style="list-style-type: none"> <li>1. Kartezjusz, "Rozprawa o metodzie". Warszawa 2002.</li> <li>2. H.-G. Gadamer, „Prawda i metoda”. Warszawa 2004.</li> <li>3. J. Habermas, „Teoria i praktyka”. Warszawa 1983.</li> <li>4. M. Johnson, „Teoria archeologii. Wprowadzenie”. Kraków 2013.</li> <li>5. M. S. Przybyła, „Teoria ewolucji w archeologicznych badaniach nad dawnymi społeczeństwami”. Kraków 2014.</li> <li>6. H. Vandkilde, „Bronzization. The Bronze Age as Pre-Modern Globalization” <i>Præhistorische Zeitschrift</i> 91, 103-123 (2016).</li> </ol>
Supplementary literature:	<ol style="list-style-type: none"> <li>1. Hodder I. „Czytanie przeszłości”, Poznań 1995.</li> <li>2. A. Marciniak i in. (red.), <i>Przeszłość społeczna. Próba konceptualizacji</i>”. Poznań 2012.</li> <li>3. Assman J. <i>Pamięć kulturowa. Pismo, zapamiętywanie i polityczna tożsamość w cywilizacjach starożytnych</i>. Warszawa 2008.</li> <li>4. Barański J. <i>Świat rzeczy. Zarys antropologiczny</i>. Kraków 2007.</li> <li>5. Kadrow S., Rączkowski W. (red.), <i>Things, Sources, Interpretations (= Analecta Archaeologica Ressoviensia 4)</i>. Rzeszów 2009.</li> </ol>