University of Gdańsk

Subject card

Subject name and code	Artificial intelligence in the art historian's workshop, PG_00203566						
Field of study	History of Art						
Date of commencement of studies	October 2026		Academic year of realisation of subject	2027/2028			
Education level	Bachelor's studies		Subject group	Obligatory subject group in the field of study Humanistic-social subject group			
Mode of study	full-time studies		Mode of delivery	at the university			
Year of study	2		Language of instruction	Polish			
Semester of study	4		ECTS credits	2.0			
Learning profile	academic		Assessment form	credit			
Conducting unit	Division of Early Modern Art -> Institute of Art History -> Faculty of History -> Rector						
Name and surname of lecturer (lecturers)	Subject supervisor	dr Hubert Baumann					
	Teachers						
Lesson types	Lesson type	Lecture	Tutorial	Laboratory	Project	Seminar	SUM
	Number of study hours	0.0	30.0	0.0	0.0	0.0	30
	E-learning hours included: 0.0						
Learning activity and number of study hours	Learning activity	Participation in didactic classes included in study plan		Participation in consultation hours	Self-study	SUM	
	Number of study hours	30		2.0	18.0	50	
Subject objectives	Developing students' skills in the practical use of artificial intelligence tools in research in the field of art history and cultural heritage protection. The course teaches the use of simple models and applications to support the analysis, description, and interpretation of works of art, the creation of illustrative materials, and the organization of visual and textual data. The course also introduces basic technological and ethical issues necessary for the conscious and responsible use of AI in the humanities.						

Learning outcomes

Course outcome	Subject outcome	Method of verification
[HISTSZL3_K01] Critically evaluates his/her knowledge, demonstrates a willingness to continually expand his/her knowledge and to seek expert advice if he/she has difficulty solving a problem on his/her own	Consciously and ethically uses artificial intelligence tools, is ready to critically reflect on the results generated by these tools, consciously assesses their reliability, and recognizes the need to consult experts from various fields.	[SK1] oral statement/conversation/ discussion [SK2] presentation/project/paper/ report
[HISTSZL3_U05] Is able to retrieve information (using bibliographies, archival aids, databases, various resources available on the Internet, etc.) and critically analyse, classify, categorise and synthesise it in order to solve a problem formulated by him/herself or others	Can classify, organize, and interpret visual and textual materials using AI algorithms and synthesize their results for the purposes of their own research.	[SU2] presentation/project/paper/ report [SU5] implementation of a problem task
[HISTSZL3_W06] Knows to an advanced degree the research methods and tools of the art historian's workshop, in particular the methods of analysis and interpretation of art products of different epochs	knows the basic principles of operation and potential applications of artificial intelligence and machine learning methods in the analysis and interpretation of works of art, understanding their place in the modern art historian's toolkit.	[SW2] presentation/project/paper/ report
[HISTSZL3_U11] Is able to plan and organise his/her work effectively, independently acquiring and consolidating knowledge in a structured and systematic manner	Can plan their research work, select methods, and use AI tools in a systematic and conscious manner.	[SU2] presentation/project/paper/ report
[HISTSZL3_W08] Knows and understands the key economic, legal, ethical and other considerations of various professional activities, including the basic concepts and principles of industrial property protection and copyright law	Knows the basic concepts, methods, and tools of artificial intelligence used in art research, as well as their limitations and interpretive potential. Understands the economic, legal, and ethical aspects of using AI tools in the humanities, including issues of copyright, data ownership, and responsibility for results generated by algorithms.	[SW2] presentation/project/paper/ report
[HISTSZL3_K06] Has a belief in the importance of behaving in a professional manner, reflecting on ethical issues and is willing to adhere to the principles of professional ethics	Understands the ethical aspects of using artificial intelligence tools in art research and the professional practice of an art historian, and is prepared to adhere to the principles of scientific integrity and intellectual property protection.	[SK1] oral statement/conversation/ discussion [SK2] presentation/project/paper/ report

Subject contents

The course introduces the use of artificial intelligence in the humanities, with particular emphasis on research in art and architecture. It discusses the basic principles of contemporary AI tools and their applications in the analysis and description of works of art, the development of visual and textual materials, as well as in the digitization and interpretation of sources. The classes include examples of the practical use of technologies that support image recognition, text processing, and research processes. Participants learn to evaluate the usefulness of available tools and interpret their results, taking into account basic methodological, technological, and ethical issues.

Prerequisites and co-requisites

Basic knowledge of art history, humanities research methodology, and basic computer skills and online information retrieval.

Assessment methods and criteria

Subject passing criteria	Passing threshold	Percentage of the final grade
Attendance	80.0%	0.0%
Final project	51.0%	100.0%

Recommended reading	Basic literature	Art History and AI: Ten Axioms. *International Journal for Digital Art History* 9 (2023). Cardinal, Marco. Digital Tools and Technical Views: The Intersection of Digital Art History and Technical Art History in a Digital Archive on the Painting Technique of Caravaggio and His Followers. *Visual Resources* 35, nr 12 (2019): 5973. Grabowska, Anna. Immersyjne doświadczenie kultury. Wykorzystanie AI, VR i AR w promocji dziedzictwa i edukacji. *Zarządzanie w Kulturze* 26, nr 2 (2025): 109136. Komandowska, Zuzanna. Wyzwania i perspektywy praw autorskich w kontekście prac generowanych przez sztuczną inteligencję (Challenges and Perspectives of Copyright in the Context of AI-Generated Works). *Rocznik Administracji Publicznej* 11 (2025): 85102. Radomski, Andrzej. *Wprowadzenie do humanistyki cyfrowej.* Lublin: Wydawnictwo KUL, 2023. Seidel-Grzesińska, Agnieszka, i Ksenia Stanicka-Brzezicka. Historia sztuki w dobie humanistyki cyfrowej. W: *Od Gutenberga do Zuckerberga. Wstęp do humanistyki cyfrowej*, red. Adam Pawłowski, 425426. Kraków: Towarzystwo Autorów i Wydawców Prac Naukowych UNIVERSITAS, 2023. Smołucha, Danuta. *Humanistyka cyfrowa w badaniach kulturowych. Analiza zjawiska na wybranych przykładach.* Kraków: Wydawnictwo Naukowe UP, 2021. The Role of Artificial Intelligence in Art. *AccScience Publishing* 3, nr 2 (2024). DOI: 10.36922/ac.331.
	Supplementary literature	Bajohr, Hannes, red. *Thinking with AI: Machine Learning the Humanities.* London: Open Humanities Press, 2024. Crawford, Kate. *Atlas sztucznej inteligencji.* Warszawa: Wydawnictwo Uniwersytetu Warszawskiego / WUJ, 2024. Flasiński, Mariusz. *Wstęp do sztucznej inteligencji.* Warszawa: Wydawnictwo Naukowe PWN, 2018. Kurp, Feliks. *Sztuczna inteligencja od podstaw.* Warszawa: Helion, 2023. Kuroczyński, Piotr. Problemy i potencjał cyfrowej rekonstrukcji architektury na przykładzie projektu zrekonstruowania dwupiętrowej historii Bazyliki św. Piotra w Watykanie z osiemnastowiecielitnego rozwoju Kremula Mosulwie. W: *Nowoczesne metody gromadzenia i udostępniania wiedzy o zabytkach*, red. Agnieszka Seidel-Grzesińska i Ksenia Stanicka-Brzezicka. Wrocław: Via Nova, 2008. Modelewska, Elżbieta, i Robert Sitnik. Odwzorowanie powierzchni obiektu zabytkowego za pomocą skanu 3D. W: *Nowoczesne metody gromadzenia i udostępniania wiedzy o zabytkach*, red. Agnieszka Seidel-Grzesińska i Ksenia Stanicka-Brzezicka. Wrocław: Via Nova, 2008. Oksanen, Atte, Anica Cvetkovic, Nalan Akin, Rita Latikka, Jenna Bergdahl, Yang Chen, i Nina Savela. Artificial Intelligence in Fine Arts: A Systematic Review of Empirical Research. *Computers in Human Behavior: Artificial Humans* 1 (2023): art. 100004. https://doi.org/10.1016/j.chbah.2023.100004. Od Gutenberga do Zuckerberga. *Wstęp do humanistyki cyfrowej*, red. Adam Pawłowski. Kraków: Towarzystwo Autorów i Wydawców Prac Naukowych UNIVERSITAS, 2023. Russell, Stuart, i Peter Norvig. *Sztuczna inteligencja. Nowe spojrzenie.* T. 12. Gliwice: Helion, 2023. Schrier, K., red. *Generative AI and the Future of the Humanities.* Cham: Springer, 2024. Spitzer, Manfred. *Sztuczna inteligencja. Ponad człowiekiem. AI jako ratunek i zagrożenie.* Warszawa: Dobra Literatura, 2025.
	eResources addresses	
Example issues/ example questions/ tasks being completed		
Work placement	Not applicable	

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