GDAŃSK UNIVERSITY OF TECHNOLOGY

Subject card

Subject name and code	Studio Technology, PG_00048140
Field of study	Electronics and Telecommunications

Date of commencement of studies	October 2020	Academic year of realisation of subject	2023/2024
Education level	first-cycle studies	Subject group	Optional subject group Subject group related to scientific research in the field of study
Mode of study	Full-time studies	Mode of delivery	at the university
Year of study	4	Language of instruction	Polish
Semester of study	7	ECTS credits	3.0
Learning profile	general academic profile	Assessment form	assessment

Conducting unit	Department of Multimedia Systems -> Faculty of Electronics, Telecommunications and Informatics
Name and surname of lecturer (lecturers)	**Subject supervisor** prof. dr hab. inż. Bożena Kostek
	Teachers prof. dr hab. inż. Bożena Kostek dr inż. Karolina Marciniuk dr inż. Piotr Odya dr inż. Bartłomiej Mróz

Lesson types and methods of instruction	Lesson type	Lecture	Tutorial	Laboratory	Project	Seminar	SUM
	Number of study hours	15.0	0.0	30.0	0.0	0.0	45
	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	45	3.0	27.0	75

Subject objectives	The aim of the course is to familiarize students with the basic issues of studio technology and to show them the basics of audio engineer work.

Learning outcomes	Course outcome	Subject outcome	Method of verification
	[K6_U03] can design, according to required specifications, and make a simple device, facility, system or carry out a process, specific to the field of study, using suitable methods, techniques, tools and materials, following engineering standards and norms, applying technologies specific to the field of study and experience gained in the professional engineering environment	The student can prepare the authoring of audio-video recordings on optical media.	[SU4] Assessment of ability to use methods and tools [SU3] Assessment of ability to use knowledge gained from the subject [SU1] Assessment of task fulfilment
	[K6_W05] Knows and understands, to an advanced extent, methods of supporting processes and functions, specific to the field of study	The student knows and understands how to choose acoustic plans, microphones and stereo techniques for verbal and instrumental recordings as well as lighting techniques and composition of the visual image of the film set.	[SW1] Assessment of factual knowledge
	[K6_W03] Knows and understands, to an advanced extent, the construction and operating principles of components and systems related to the field of study, including theories, methods and complex relationships between them and selected specific issues - appropriate for the curriculum	The student has basic knowledge in the field of studio technology. He understands the construction of the modern audio and video studio.	[SW1] Assessment of factual knowledge
	[K6_W35] Knows the concepts of the technique of signal transmission, operation of telecommunications networks and multimedia services and the rules for providing them	The student knows and understands the basic problems of audio recordings in multimedia products	[SW1] Assessment of factual knowledge

Subject contents	
	Lecture 1. Introduction. Fundamentals 2. Construction of an audio-video studio 3. Overview of microphone design types 4. Overview of loudspeaker and headphone design types 5. Speech and voice recording requirements 6. Musical instruments requirements 7. Sound production for multimedia 8. Shots in video production (shot selection, influence of shot selection on shot climate) 9. Movie location set up 10. Video lighting set up 11. Basic video compositing techniques 12. Preparation of sounds and videos for DVD/Blu-Ray authoring 13. Principles of intellectual property law 14. Lecture summary 15. Test **Laboratory** 1. Preparation for a radio drama 2. Preparation for a radio drama – editing 3. TV Commercial recording 4. Recording of a single musical instrument 5. Preparation and recording of TV news 6. CD/DVD authoring 7. Students' productions reviewing

Prerequisites and co-requisites	

Assessment methods and criteria	Subject passing criteria	Passing threshold	Percentage of the final grade
	Practical exercise	50.0%	50.0%
	Midterm colloquium	50.0%	50.0%

Recommended reading	Basic literature	St. Miszczak, Podstawy technologii studyjnej w radiofonii i telewizji, WKiŁ, Warszawa, 1979. K. Blair Benson, Sound Engineering Handbook, McGraw Hill, New York, 1988. H. Wyatt, T. Amyes, Audio Post Production for Television and Film, Focal Press, Amsterdam, 2005. J. Rose, Audio Postproduction for Digital Video, CMPBooks, San Francisco, 2002. St. Miszczak, Teoretyczne zasady reżyserii dźwięku w radiofonii i telewizji, WKiŁ, Warszawa, 1976. J. Eargle, Sound Recording, Van Nostrand, New York, 1976. S. Price, Digital Audio Editors, Studio Sound, March 1989.
	Supplementary literature	No requirements
	eResources addresses	Adresy na platformie eNauczanie: Technologia studyjna - laboratorium - zima 2023 - Moodle ID: 33518 https://enauczanie.pg.edu.pl/moodle/course/view.php?id=33518

Example issues/ example questions/ tasks being completed	
Work placement	Not applicable