GDAŃSK UNIVERSITY OF TECHNOLOGY

Subject card

Subject name and code	Software Usability, PG_00064476
Field of study	Informatics

Date of commencement of studies	February 2026	Academic year of realisation of subject	2025/2026
Education level	second-cycle studies	Subject group	Optional subject group Specialty 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	1	Language of instruction	Polish
Semester of study	1	ECTS credits	3.0
Learning profile	general academic profile	Assessment form	exam

Conducting unit	Department Of Software Engineering -> Faculty Of Electronics Telecommunications And Informatics -> Wydziały Politechniki Gdańskiej

Name and surname of lecturer (lecturers)	Subject supervisor	dr hab. inż. Agnieszka Landowska
	Teachers	dr hab. inż. Agnieszka Landowska dr inż. Michał Wróbel

Lesson types and methods of instruction	Lesson type	Lecture	Tutorial	Laboratory	Project	Seminar	SUM
	Number of study hours	15.0	0.0	0.0	15.0	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	6.0	39.0	75

Subject objectives	The purpose of the subject is to get familiar with the problem and methods of quality assurance and user experience evaluation in the software development.

Learning outcomes	Course outcome	Subject outcome	Method of verification
	[K7_K02] is ready to provide critical evaluation of received content and to acknowledge the importance of knowledge in solving cognitive and practical problems	Proposes modifications of designed and existing software applications based on the results of the usability study.	[SK5] Assessment of ability to solve problems that arise in practice
	[K7_U08] while identifying and formulating engineering tasks specifications and solving these tasks, can: - apply analytical, simulation and experimental methods, - notice their systemic and non-technical aspects, - make a preliminary economic assessment of suggested solutions and engineering work	Plans and conducts experimental software usability study.	[SU1] Assessment of task fulfilment
	[K7_W10] knows and understands, to an increased extent, the basic processes occurring in the life cycle of equipment, objects and technical systems, as well as methods of supporting processes and functions, specific to the field of study	Student can propose a set of non-functional requirements systems and IT toolkit to support organisation functioning.	[SW3] Assessment of knowledge contained in written work and projects
	[K7_W11] knows and understands, to an increased extent, the general principles of creation and development of forms of individual entrepreneurship and the economic, legal and other conditions of various types of activities related to the awarded qualification, including the principles of protection of industrial property and copyright law	Student understands how systems support its users and customers	[SW3] Assessment of knowledge contained in written work and projects

Subject contents	1. The concept of quality, usability and user experience, 2. Selection of the attributes of quality for use with the method: tree quality, GQM 3. Methods and techniques of measuring usability 4. Prototyping 5. Study of the user experience (UX) 6. Tools to help in the study of usability and user experience 7. The issue of accessibility (users with special needs).

Prerequisites and co-requisites	No requirements

Assessment methods and criteria	Subject passing criteria	Passing threshold	Percentage of the final grade
	Exam	50.0%	50.0%
	Project	50.0%	50.0%

Recommended reading	Basic literature	• Sikorski Marcin, Interakcja człowiek-komputer, PJWSTK, 2010.
	Supplementary literature	• Bill Albert, Tom Tullis. Measuring the user experience: collecting, analyzing, and presenting usability metrics. Newnes. 2013. • Martin Paul, Bateson Patrick, Measuring behaviour. An introductory Guide. Cambridge University Press, 2007. • Jayaswal, Patton, „Oprogramowanie godne zaufania", Helion, 2010. • Bereza-Jarociński B.: Inżynieria oprogramowania: jak zapewnić jakość tworzonym aplikacjom, Gliwice, Wydawnictwo Helion, 2009. • Begier B.: Doskonalenie jakości oprogramowania przez włączenie użytkowników w proces jego wytwarzania, Poznań, Wydawnictwo Politechniki Poznańskiej, 2007. • Tidwell J.: Designing interfaces, Projektowanie interfejsów: sprawdzone wzorce projektowe, Gliwice, Wydawnictwo Helion, 2012. • Cooper A.: Wariaci rządzą domem wariatów: dlaczego produkty wysokich technologii doprowadzają nas do szaleństwa i co zrobić, żeby tego uniknąć, Warszawa, Wydawnictwa Naukowo-Techniczne, 2001.
	eResources addresses	Adresy na platformie eNauczanie:

Example issues/ example questions/ tasks being completed	Task 1. Usability evaluation of applications Taks 2. Elaboration of prototype of a software tool.

Work placement	Not applicable

Document generated electronically. Does not require a seal or signature.