МИНОБРНАУКИ РОССИИ
федеральное государственное бюджетное образовательное учреждение
высшего образования
«ИРКУТСКИЙ ГОСУДАРСТВЕННЫЙ УНИВЕРСИТЕТ»
ФГБОУ ВО «ИГУ»

Кафедра европейских языков

УТВЕРЖДАЮ:
Директор МИЭЛ О. В. Архинкин
« 22 » апреля 2026 г.

Рабочая программа дисциплины

Наименование дисциплины	**Б1.О.05 Педагогическое проектирование в цифровой образовательной среде / Material Design in Digital Environment**
Направление подготовки	**45.04.02 Лингвистика**
Направленность подготовки	Проектирование цифрового лингвистического образовательного контента / Digital Linguistic Educational Content Design»
Квалификация выпускника –	магистр
Форма обучения	очная с применением электронного обучения, дистанционных образовательных технологий

Согласовано с УМК МИЭЛ ИГУ:
Протокол № 3 от « 23» марта 2026 г.
Председатель _____ Е. В. Крайнова

Рекомендовано кафедрой:
Протокол № 7 от «10» марта 2026 г.
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Иркутск 2026 г.

Б1.О.05 Педагогическое проектирование в цифровой образовательной среде / Material Design in Digital Environment

Goal:

To develop students' professional design competence in the digital educational environment, enabling them to design, organize, and evaluate the educational process using digital technologies based on systemic, activity-based, and learner-cantered approaches within the modern transforming educational paradigm.

Objectives:

1. Master the theoretical foundations of pedagogical design in digital educational environment, including regulatory, didactic, and ergonomic requirements.
2. Develop the ability to plan, organize, and implement the educational process in a digital environment considering learning models, instructional design principles, and age-specific characteristics.
3. Develop the skill of designing educational content and digital resources (interactive worksheets, video lectures, podcasts, infographics) for various learning tasks and subject areas.
4. Improve the ability to use modern technologies for designing interaction and communication in a digital environment for collaborative learning.
5. Develop the ability to apply assessment technologies in a digital environment (automated testing, formative assessment, learning analytics, criterion-based rubrics).
6. Develop the skill of analysing and evaluating one's own design activities in a digital environment (self-assessment, reflection, adjustment, and scaling).
7. Develop the ability to carry out information retrieval activities for professional self-development in digital educational technologies, improving digital communication, and working with participants of educational relations in a digital environment.

CONTENT AND STRUCTURE OF THE DISCIPLINE

This discipline consists of 8 credit units, or 288 hours
Of these, 16 hours are taught using e-learning and distance learning technologies
Midterm assessment form: 1st term – credit, 2nd term – exam

Discipline content, structured by topic, indicating the types of classes and the number of academic hours allocated to them

№	Section of the discipline / topic	term	Total number of academic hours	Practical training (in hours)	Types of studies, Including student's independent work, classroom hours and studies intensity (in academic hours)				Forms of ongoing progress monitoring; midterm assessment form (by semester)
					Contact work between the lecturer and the student			Student's independent (self-study) work	
					Lectures	Classroom studies	Consultations		
1	2	3	4	5	6	7	8	9	10
1	Pedagogical Design as a Foundation of Digital Transformation of Education	1	24		2	2		20	oral assessment, report presentation
2	Models and Technologies of Designing Digital Educational Process	1	26		2	4		20	oral assessment, report presentation, project
3.	Designing Content and Digital Educational Resources	1	30		4	4		22	oral assessment, report

									presentation, project
4.	Designing Interaction and Communication in Digital Educational Environment	1	28		4	4		20	oral assessment, report presentation, project
5.	Designing Assessment Systems in Digital Educational Environment	1	28		4	4		20	oral assessment, report presentation, project
	Total number of academic hours in 1st term: 144		**136**		**16**	**18**		**102**	**credit**
6.	Designing a Safe and Health-Preserving Digital Environment	2	20		4	4		12	oral assessment, report presentation, project
7.	Project Management for the Creation and Implementation of Digital Educational Products	2	20		4	4		12	oral assessment, report presentation, project
8.	Professional Competence of a Teacher in the Field of Designing Digital Educational Technologies	2	16		2	2		12	oral assessment, report presentation
9.	Designing an Inclusive Digital Educational Environment	2	16		2	2		12	oral assessment, report presentation
10.	Trends and Prospects of Pedagogical Design in a Digital Environment	2	36		4	6	1	25	oral assessment, report presentation? project
	Total number of academic hours in 2nd term: 144		**108**		**16**	**18**	**1**	**73**	**exam**
	Total number of academic hours:		**244**		**32**	**36**	**1**	**175**	

Contents of Educational Material

Topic 1. Pedagogical Design as a Foundation of Digital Transformation of Education

Pedagogical design: essence, objects, types. Digital educational environment as a space for design. Regulatory and legal frameworks for design in digital educational environment (Federal State Educational Standards, Professional Standard for Teachers, requirements for e-learning). Principles and regularities of pedagogical design in the context of digitalization (systematicity, flexibility, modularity, personalization).

Topic 2. Models and Technologies of Designing Digital Educational Process

Learning models in digital educational environment: blended learning (station rotation, flipped classroom), online learning, hybrid formats. Designing educational outcomes in a digital environment: SMART goals, Bloom's taxonomy in a digital context, formative assessment. Instructional design technologies (ADDIE, SAM, backward design) in the development of digital courses.

Topic 3. Designing Content and Digital Educational Resources

Requirements for digital educational resources (interactivity, adaptability, accessibility, visualization). Content creation tools: e-learning modules, infographics, video lectures, podcasts, interactive worksheets. Organization of project-based and research activities of students using digital services.

Topic 4. Designing Interaction and Communication in Digital Educational Environment

Forms of synchronous and asynchronous communication (webinars, forums, chats, video conferences). The role of a tutor and facilitator in a digital environment: support scenarios, feedback, attention retention. Designing collaborative learning activities (shared documents, virtual whiteboards, group projects).

Topic 5. Designing Assessment Systems in Digital Educational Environment

Transformation of assessment in digital educational environment: automated testing, e-portfolio, gamification. Designing criterion-based and formative assessment using digital tools. Learning analytics: data collection, interpretation, and educational process correction.

Topic 6. Designing a Safe and Health-Preserving Digital Environment

Principles of information security, personal data protection, digital etiquette. Designing the educational process considering health regulations for work with digital devices. Prevention of digital fatigue and overload: time management, activity rotation, digital detox.

Topic 7. Project Management for the Creation and Implementation of Digital Educational Products

Life cycle of a pedagogical project in digital educational environment (initiation, planning, implementation, monitoring, approbation). Project team: roles (instructional designer, methodologist, IT specialist, moderator). Risks and barriers to implementing digital solutions (teacher resistance, lack of competencies, digital divide).

Topic 8. Professional Competence of a Teacher in the Field of Designing Digital Educational Technologies

Digital competencies of a teacher: TPACK model, digital literacy, readiness for project-based activity. Tools for collaborative teacher work in design (cloud services, task trackers, resource repositories). Self-assessment and reflection of a pedagogical project: feedback collection, adjustment, scaling.

Topic 9. Designing an Inclusive Digital Educational Environment

Principles of Universal Design for Learning (UDL) applied to the digital educational environment. Adaptation of digital materials for students with disabilities (screen readers, subtitles, alternative formats). Designing support pathways for different categories of students in a digital environment.

Topic 10. Trends and Prospects of Pedagogical Design in a Digital Environment

Artificial intelligence in education: designing adaptive courses, chatbots, automatic task generation. Immersive technologies (VR/AR) in designing educational experiences. Open educational resources and Massive Open Online Courses (MOOCs) as objects of pedagogical design.

REQUIREMENTS FOR DISCIPLINE ACHIEVEMENT

List of planned learning outcomes by discipline correlated with indicators of achievement

Competence	Indicators of achievement	Discipline outcomes
УК-2 Able to manage a project at all stages of its life cycle	**ИДК** $_{УК2.1}$ Develops a project concept within the framework of the identified problem	**ИДК** $_{УК2.1}$ **Knowledge:** essence, objects and types of pedagogical design; principles of systematicity, flexibility, modularity and personalization in the context of digitalization; stages of the pedagogical project life cycle in digital educational environment: initiation, planning, implementation, monitoring, approbation. **Skills:** formulate a pedagogical problem solvable by means of digital educational environment; develop a project concept; identify target groups and expected results of design. **Competences:** applying the method of setting SMART goals in relation to a digital educational product.
	ИДК $_{УК2.2}$ Organizes and coordinates the work of project participants, facilitates constructive resolution of emerging disagreements and conflicts, and provides the team with the necessary resources	**ИДК** $_{УК2.2}$ **Knowledge:** roles in the project team: instructional designer, methodologist, IT specialist, moderator; forms of synchronous and asynchronous communication in digital educational environment (webinars, forums, chats); tools for collaborative work: cloud services, task trackers,

		resource repositories. **Skills:** distribute functional responsibilities among project team members; organize collaborative activities using virtual boards and shared documents; select resource provision for project implementation. **Competences:** using facilitation and moderation techniques for project meetings in a digital environment.
	ИДК $_{УК2.3}$ Monitors the progress of the project (research), makes additional changes (if necessary) to the plan, and proposes possible paths (algorithms) for implementing the project results	**ИДК** $_{УК2.3}$ **Knowledge:** methods of collecting and interpreting Learning Analytics data; principles of self-assessment and reflection of a pedagogical project; risks and barriers to implementing digital solutions (teacher resistance, digital divide). **Skills:** develop monitoring tools (questionnaires, checklists) based on requirements for digital resources; adjust the project based on approbation results; formulate recommendations for scaling the project. **Competences:** presenting project results using digital tools.
УК-3 Able to organize and manage teamwork, developing a team strategy to achieve the stated goal	**ИДК** $_{УК3.1}$ Develops a collaboration strategy and, on its basis organizes the selection of team members to achieve the stated goal	**ИДК** $_{УК3.1}$ **Knowledge:** learning models in digital educational environment (blended, hybrid, online) as a context for teamwork; role structure of the project team and criteria for selecting participants; principles of digital etiquette and information security. **Skills:** determine the cooperation strategy depending on the project format (synchronous / asynchronous); assess the

		competencies of potential team members. **Competences:** motivating project team participants through gamification and formative assessment.
	ИДК **УК3.2** Organizes discussions on a given topic and discussion of work results, involving opponents of the developed ideas	**ИДК** **УК3.2** **Knowledge:** forms of organizing discussions in digital educational environment (forums, webinars, round tables); the role of a tutor and facilitator in a digital environment; principles of organizing feedback and attention retention. **Skills:** moderate an asynchronous discussion on an educational platform; formulate questions to engage opponents and critically analyse project ideas; summarize and record discussion results using digital whiteboards. **Competences:** applying techniques of constructive criticism and argumentation when defending a pedagogical project.
	ИДК **УК3.3** Plans teamwork, assigns tasks, and delegates authority to team members	**ИДК** **УК3.3** Knowledge: tools for planning teamwork: task trackers, cloud services, resource repositories; requirements for organizing project and research activities of students (as an analogy for teamwork). **Skills:** develop a project roadmap indicating responsible persons and deadlines; distribute tasks taking into account competencies and workload of participants; monitor intermediate results using digital tools. **Competences:** managing a project team in a digital

		environment, including task setting, delegation of authority, coordination of execution and control of results using modern digital tools.
ОПК-6 Is able to apply modern technologies in the implementation of data collection, processing and interpretation of empirical research; create and format scientific documentation	**ИДК $_{ОПК6.1}$** Is proficient in word, tabular and graphic information processing technologies; knows how to use specialized software in professional activities	**ИДК $_{ОПК6.1}$** **Knowledge:** methods of Learning Analytics: data collection, interpretation and process correction; transformation of assessment in digital educational environment: automated testing, e-portfolio; principles of designing criterion-based and formative assessment using digital tools. **Skills:** use data collection tools (built-in LMS analytics, Google Forms) for empirical research; interpret students' digital footprints to adjust the educational process; compile a report on the results of approbation of a digital product. **Competence:** visualizing data (charts, dashboards) using digital tools.
ОПК-7 Able to work with the main information-search and expert systems, knowledge presentation systems and verbal information processing	**ИДК $_{ОПК7.1}$** Demonstrates how to use local and global computer networks. Can work with distributed databases and knowledge	**ИДК $_{ОПК7.1}$** Knowledge: regulatory and legal foundations of design in digital educational environment (Educational Standards, Professional Standard for Teachers, requirements for e-learning); content creation tools: e-learning modules, video lectures, podcasts, interactive worksheets; open educational resources and MOOCs as objects of pedagogical design; principles of information security and personal data protection. **Skills:** search for scientific and methodological literature using information retrieval systems; apply expert systems

		(automated knowledge assessment systems) for assessment; use verbal information processing tools (tag clouds, sentiment analysis) to process feedback. **Competences:** working with abstract databases to substantiate the relevance of a pedagogical project; skills in designing adaptive courses using AI (chatbots, task generation).

Разработчик:

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Зав. кафедрой _____ И. С. Шильникова