

Name of the Discipline	Scientific and Pedagogical Activities				
Semester(s)	1, 2, 3,4				
Responsible teacher	Sultanov Marat Mirzayevich, Doctor of Chemical Sciences (DSc), Professor Rashidova Komila Khamidovna, Doctor of Philosophy (PhD) in Chemical Sciences, Associate Professor Muminova Nargiza Ismatullayevna, Doctor of Philosophy (PhD) in Chemical Sciences, Associate Professor				
Language of teaching/learning	Uzbek				
Connection to the curriculum	Compulsory				
Forms of teaching/learning	Practical (practice)				
Academic workload (including contact hours and self-study)	Semester	1	2	3	4
	<b>Total workload</b>	<b>120</b>	<b>180</b>	<b>180</b>	<b>180</b>
ECTS	20				
Prerequisites					
Discipline objectives / Learning Outcomes	<p>The purpose of the discipline is to acquire practical skills in teaching; the formation of professional competence, manifested in the readiness to develop models of Kimyo classes, analyze them taking into account psychological, pedagogical and scientific-methodological requirements.</p> <p>Learning outcomes</p> <ul style="list-style-type: none"> <li>- the ability to apply methods of scientific knowledge in independent research activities, generate and implement innovative ideas;</li> <li>- own the methodology of scientific knowledge, be able to analyze and evaluate the content and level of philosophical and methodological problems when solving problems of research and innovation activities;</li> <li>- have the skills to use modern information technologies to solve research and innovation problems;</li> <li>- the ability to carry out pedagogical activities in educational institutions, to master and implement effective educational and information and communication technologies, pedagogical innovations;</li> <li>- master the techniques and methods of personal and professional development of a teacher-researcher, building a professional career and pedagogical ideals, norms and principles of pedagogical and scientific ethics, individual abilities and inclinations, etc.</li> </ul>				

Lessons' contents	<p>Content</p> <ol style="list-style-type: none"> <li>1. Current problems of vocational education, innovative and scientific-pedagogical activities</li> <li>2. Methodology of scientific and pedagogical research</li> <li>3. Information and communication technologies in scientific, pedagogical and innovative activities</li> <li>4. Инновации в истории образования как движущий фактор развития</li> <li>5. Pedagogy and psychology of higher education</li> <li>6. Management in Education</li> <li>7. Teacher's personal effectiveness</li> <li>8. Innovative approaches and technologies in education</li> <li>9. Socialization and education in the context of global challenges and risks</li> </ol>
The exam format	Preparation of the report and its protection
Teaching/learning and examination requirements	<p>No more than 2 days are allotted for drawing up the final report, during which undergraduates put their individual plan in order, prepare written reports, and prepare presentations. Each undergraduate submits the following materials:</p> <ul style="list-style-type: none"> <li>- Text of the report;</li> <li>- Individual plan and characteristics from the manager;</li> <li>- Presentations of master's students-interns in electronic form.</li> </ul> <p>The credit for scientific and pedagogical activities (practice) is accepted by the commission in accordance with the approved order, in the presence of all undergraduates and their supervisors. During the certification, the competencies of master's students-interns, which they mastered in the process of carrying out scientific and pedagogical activities (practice), are assessed.</p>
Bibliography	<ol style="list-style-type: none"> <li>1. Магистрлик диссертацияларини тайёрлаш бўйича методик тавсиянома: магистратура бўлимининг барча мутахассисликлари учун мўлжалланган. – Т: ТДПУ, 2010. – 60 б.</li> <li>2. Шермухамедова Н.А. Илмий тадқиқот методологияси. – Т.: “Fan va texnologiya”, 2014. – 512 б.</li> <li>3. Алемасов В., Мамадалиев Ш. Илмий тадқиқот: методология, методика ва ижодиёт. – Т.: Ўзбекистон Республикаси ИИВ Академияси, 2015. – 102 б.</li> <li>4. Ranjit Kumar. Research methodology a step-by-step guide for beginners. – Sage, New Delhi, 2011. – 415 p.</li> <li>5. Саифназаров И., Никитченко Г.В., Б.У.Қосимов. Илмий ижод методологияси. – Т.: Янги аср авлоди, 2004. – 190 б.</li> <li>6. Тўракулов Х.А., Тўракулов О.Х., Тўракулов И.Х., Тўракулов У.Х. Илмий тадқиқот асослари: 1000 саволга 1000 жавоб. – Т.: Fan va texnologiya, 2019. – 632 б.</li> </ol>