RUSSIAN MINISTRY OF SCIENCE AND HE
Federal State Budgetary Educational Institution
of Higher Education
"IRKUTSK STATE UNIVERSITY"
SAF, Baikal International Business School (institute)
Strategic and Financial Management Department

APPROVED:
Dean of SAF, Baikal International Business School (institute)
_____ N.B. Grosheva
April 14, 2025

Syllabus

Discipline Б1.В.ДВ.01.01 Research

Major 27.03.05 Innovatics

Specialization: Management of Innovative and IT Projects and Products
University Degree: bachelor
Full time

Approved by the Academic and Methodological Council of Baikal International Business School (institute)
Protocol № 4 of March 26, 2025

Chairperson V.M. Maksimova

Recommended by the Strategic and Financial Management Department
Protocol № 9 of March 21, 2025

Department Chair N.B. Grosheva

Irkutsk 2025

Contents

I. Discipline Goal and Objectives

Goal:

to develop the ability to organize research work, search, process, analyze, and synthesize information necessary for conducting research, as well as to prepare analytical materials across various disciplines and present the results of the conducted research in the form of a report, presentation, or article.

Objectives:

- Developing practical skills in designing and conducting empirical research;
- Developing the ability to formulate research methodology aligned with the goals of an innovation project;
- Mastering methods of data collection and processing using modern tools;
- Implementing a small-scale research project in accordance with scientific research methodology and ethical principles;
- Developing critical thinking skills for the interpretation of research results;
- Developing the ability to formulate evidence-based conclusions and recommendations based on the data obtained;
- Improving skills in public presentations of research findings;
- Developing teamwork skills (organizing research, coordinating and monitoring the work of project participants);
- Mastering the skills of self-improvement based on self-assessment.

II. PLACE OF THE DISCIPLINE IN THE CPEP STRUCTURE

The academic discipline “Б1.В.ДВ.01.01 Research” belongs to the elective part of the Bachelor's program in 27.03.05 Innovatics, specialization "Management of Innovative and IT Projects and Products," and complements the general education discipline Б1.О.01"Introduction to Research." Unlike " Introduction to Research," which teaches the acquisition of scientific inquiry skills, research methods, and the formation of research thinking to understand reality, "Research " is aimed at the practical, independent execution of scientific inquiry to gain new knowledge or solve relevant practical tasks in the field of innovation.

Studying this discipline requires the knowledge, skills, and abilities formed in school through project-based research activities and the writing of research papers.

The list of subsequent academic disciplines for which the knowledge, skills, and abilities developed in this discipline are required: "Academic Practice. Project Practice," "Industrial Practice. Organizational and Management Practice," "Industrial Practice. Pre-graduation Practice"; "Preparation of Final Qualification Paper and its Defense."

II. REQUIREMENTS FOR THE DISCIPLINE LEARNING OUTCOMES

The process of mastering the discipline is aimed at developing the following competencies in accordance with the Federal State Educational Standard of Higher Education for the major 27.03.05 Innovatics, specialization "Management of Innovative and IT Projects and Products": UC-1.1; UC-1.2.

List of Planned Learning Outcomes for the Discipline, Mapped to Competency Achievement Indicators

Competency	Competency Achievement Indicator	Learning outcomes
UC-1 Is able to search, critically analyze and synthesize information, apply a systematic approach to solve set tasks	***CAI UC1.1*** Searches, critically analyzes and synthesizes information necessary for solving set tasks	**Master**: skills in searching, analyzing, and synthesizing **information**
	CAI UC1.2 Applies a systematic approach to solving set tasks	**Be able to:** apply a systems approach to solving assigned tasks

III. DISCIPLINE CONTENTS AND STRUCTURE

Discipline scope is 3 credits, 108 hrs.
including Self-Study – 65 hrs and 8 hrs Monitoring.
Summative assessment: pass/fail grade with a qualitative mark**– 2nd semester.**

4.1. Discipline Content, Structured by Topics, with Indicated Types of Classes and Allocated Academic Hours

№	Discipline Section/ theme	Semester	Total hrs	Including practical sessions	Types of educational activities, including sef-study, practical sessions, and workload (in hrs)				Formative Assessment Formats; Summative Assessment Format
					Teacher Contact Hrs			Self-Study	
					Lectures	Practical Sessions	Consultations, Self-Study Monitoring, Summative Assessment		
1	**2**	**3**	**4**	**5**	**6**	**7**	**8**	**9**	**10**
1	Introduction to Research	2	6	–	2	2		2	report, test
2	Problem Statement and Formulation of the Research Goal and Objectives	2	8	–	2	2		4	oral questioning, report
3	Methods of Data Collection, Organization, and Analysis	2	14	–	4	2		8	Case task, oral questioning
4	Planning and Organizing a Research Project	2	14	–	2	4		8	Case task, oral questioning
5	The Innovative Aspect of Research	2	16	–	4	2		10	report, test
6	Development, Implementation, and Presentation of a Research Project	2	42		2	6	1 (consult.)	33	
7	Summative Assessment	2	8	–	–	–	8 (Monitoring)		pass/fail grade with a qualitative mark
	Total		**108**	**–**	**16**	**18**	**9**	**65**	

4.2. Plan for Out-of-Class Student Self-Study of the Discipline

Semester	Section, themes	Self-Study			Assessment Tool	Self-Study educational and methodological support
		Type of Self-study	Deadlines	Load (hr.)		
2	Introduction to Research	Consolidation and systematization of knowledge on the lesson topic: working with notes, textbooks, reference literature, and online sources. Preparing a report/presentation..	The end of the 2nd week	2	Report	Афанасьев, В. В. Методология и методы научного исследования: учебное пособие для вузов / В.В. Афанасьев, О. В. Грибкова, Л. И. Уколова. – М.: Юрайт, 2022. – 154 с. – Текст: электронный // ЭБС Юрайт. – URL: https://urait.ru/bcode/492350
2	Problem Statement and Formulation of the Research Goal and Objectives	Consolidation and systematization of knowledge on the lesson topic: working with notes, textbooks, reference literature, and online sources. Preparing a report/presentation.	The end of the 4th week	4	Oral questioning, report	Афанасьев, В. В. Методология и методы научного исследования: учебное пособие для вузов / В.В. Афанасьев, О. В. Грибкова, Л. И. Уколова. – М.: Юрайт, 2022. – 154 с. – Текст: электронный // ЭБС Юрайт. – URL: https://urait.ru/bcode/492350
2	Methods of Data Collection, Organization, and Analysis	Consolidation and systematization of knowledge on the lesson topic: working with notes, textbooks, reference literature, and online sources. Analysis of a case-task.	The end of the 7th week	8	устный опрос	Афанасьев, В. В. Методология и методы научного исследования: учебное пособие для вузов / В.В. Афанасьев, О. В. Грибкова, Л. И. Уколова. – М.: Юрайт, 2022. – 154 с. – Текст: электронный // ЭБС Юрайт. – URL: https://urait.ru/bcode/492350
2	Planning and Organizing a Research Project	Consolidation and systematization of knowledge on the lesson topic: working with notes, educational and reference literature, and online sources. Analysis of a case-task.	The end of the 9th week	8	устный опрос	Зуб, А. Т. Управление проектами: учебник и практикум для вузов / А. Т. Зуб. – М.: Юрайт, 2022. – 422 с. – Текст: электронный // ЭБС Юрайт. – URL: https://urait.ru/bcode/489197

Semester	Section, themes	Self-Study			Assessment Tool	Self-Study educational and methodological support
		Type of Self-study	Deadlines	Load (hr.)		
2	The Innovative Aspect of Research	Consolidation and systematization of knowledge on the lesson topic: working with notes, textbooks, reference literature, and online sources. Preparing a report.	The end of the 12th week	10	report	Зуб, А. Т. Управление проектами: учебник и практикум для вузов / А. Т. Зуб. – М.: Юрайт, 2022. – 422 с. – Текст: электронный // ЭБС Юрайт. – URL: https://urait.ru/bcode/489197
2	Development, Implementation, and Presentation of a Research Project	Consolidation and systematization of knowledge on the lesson topic: working with notes, textbooks, reference literature, online sources, and data collection and analysis platforms, either individually or in a team. Preparation of a research project.	The end of the 16-17th week	33	Presentation of research results	Research results
Total self-study load (hr)				**65**		
Including the amount of independent work using e-learning and distance educational technologies (hrs)				–		

4.3. Content of Educational Material

Theme 1. Introduction to Research
The Concept and Significance of Research in the Innovation Process.
Types of Research: Fundamental, Applied, Experimental.
Main Stages and Structure of a Research Project.

Theme 2. Problem Statement and Formulation of the Research Goal and Objectives
Determining Relevance and Formulating a Scientific Problem.
Formulating the Title. Setting Research Goals and Objectives.
Formulating the Hypothesis and Assumptions.

Theme 3. Methods of Data Collection, Organization, and Analysis
Qualitative and Quantitative Data. Qualitative and Quantitative Research Methods.
Basics of Organizing Surveys, Interviews, Experiments, and Observations.
Data Presentation Methods.
Methods of Statistical Data Processing and Interpretation of Results.

Theme 4. Planning and Organizing a Research Project
Development of a research program and schedule.
Management of resources and risks in research.
Ethical standards and responsibility in scientific activity.

Theme 5. The Innovative Aspect of Research
Link between research and innovation processes.
Examples of successful innovation projects based on scientific research.
Patent registration and intellectual property protection.

Theme 6. Development, Implementation, and Presentation of a Research Project
Selecting the topic formulating the goal.
Conducting research and data collection.
Analyzing results and preparing a report.
Presenting and discussing findings.
Reflection.

4.3.1. List of Seminars, practical sessions and laboratory work

№	Theme Number	Seminars, practical and laboratory work	Load (hr.)		Assessment Tools	Developed Competencies (indicators)
			Total hrs	Including practical sessions		
1	1	Introduction to Research	**2**	–	Report	UC-1.1; C-1.2
2	2	Problem Statement and Formulation of the Research Goal and Objectives	**2**	–	Oral questioning, report	UC -1.1; UC -1.2
3	3	Methods of Data Collection, Organization, and Analysis	**2**	–	Oral questioning	UC -1.1; UC -1.2
4	4	Planning and Organizing a Research Project	**4**	–	Oral questioning	UC -1.1; UC -1.2
5	5	The Innovative Aspect of Research	**2**	–	Report	UC -1.1; UC -1.2

6	6	Development, Implementation, and Presentation of a Research Project	6		R**eport**	UC-1.1; UC-1.2
		Total hrs:	**18**			

4.3.2. List of topics (questions) assigned for independent work as part of student self-study

№	Theme	Assignment	Формируемая компетенция	ИДК
	International Scientific Resources.	Report preparation	***UC-1*** Is able to search, critically analyze and synthesize information, apply a systematic approach to solve set tasks	***CAI UC1.1*** Searches, critically analyzes and synthesizes information necessary for solving set tasks

4.4. Guidelines for Organizing Students' Self-Study

Self-study is conducted using e-learning and distance educational technologies. Teaching and methodological materials for self-preparation are available to students through electronic library systems and the "Hecadem" internet learning system, which contains lecture and practical (seminar) materials, interactive learning forms, and sample assignments. The "Hecadem" internet learning system is a platform for distance and digital technology-based learning at the Baikal International Business School (BIBS) of Irkutsk State University. Each student receives authorized access to the system. Access mode: https://edu.buk.irk.ru.

Self-study includes:

- Preparing for lectures independently—reading notes from the previous lecture, watching the lecture video (if available). This helps to better understand the material of the new lecture by building on prior knowledge.
- Preparing for practical classes using primary and supplementary literature sources.
- Independently studying specific topics or questions for classes using primary and supplementary literature sources, internet resources, and the university's electronic portal.
- Preparing for ongoing assessment and interim certification.

When performing independent work in preparation for ongoing assessment and interim certification, the student must consider the grading criteria for the assignment (see Section 8 of this program).

Supervision of independent work is carried out through the student's completion of assignments from the discipline's assessment materials pool. During this supervision, both factual knowledge and skills are assessed, as well as depth of understanding, the ability to identify and interpret coherent conceptual structures, and skills in independently searching for and critically evaluating information related to the lesson topic.

Self-study is an active, purposeful process of acquiring new knowledge and skills by the student without the direct involvement of an instructor, characterized by subject-specific focus, effective monitoring, and evaluation of the student's results.

Self-study Objectives:

- Systematizing and reinforcing acquired theoretical knowledge and practical skills.
- Deepening and expanding theoretical knowledge.
- Developing the ability to use normative and reference documentation, as well as specialized literature.
- Fostering students' cognitive abilities, activity, responsibility, and organizational skills.
- Cultivating independent thinking, creative initiative, and the capacity for self-development, self-improvement, and self-realization.

- Developing research skills and academic competencies.

Independent work can be carried out individually or in student groups, depending on the goal, scope, complexity level, and specific topic.

The technology for organizing independent student work involves utilizing the information and material-technical resources of the educational institution.

Before students begin extracurricular independent work, the instructor may provide briefing on completing the assignment. The briefing includes:

- The purpose and content of the assignment.
- Deadlines for completion.
- The approximate scope of work.
- Key requirements for the results and evaluation criteria.
- Potential typical errors during completion.

This briefing is conducted by the instructor within the time allocated for studying the discipline.

Monitoring the results of extracurricular independent work may be conducted in written, oral, or mixed formats.

Students must approach independent work as the most important means of consolidating and developing theoretical knowledge, forming a unified understanding of specific course topics, and acquiring certain skills in using professional literature.

Facilities for independent student work must be equipped with computer technology enabling internet connectivity and access to the organization's electronic information and educational environment.

When independently studying the course, students should do the following:

- Review key definitions and facts.
- Revisit material noted during lectures and supplement it using recommended literature on the topic.
- Study recommended literature, creating summaries, abstracts, and notes on the most important points.
- Independently complete tasks similar to those offered in class.
- Use the assessment materials pool for self-assessment.

V. EDUCATIONAL, METHODOLOGICAL, AND INFORMATION SUPPORT FOR THE DISCIPLINE

a) Main literature

1. Афанасьев, В. В. Методология и методы научного исследования: учебное пособие для вузов / В.В. Афанасьев, О. В. Грибкова, Л. И. Уколова. – М.: Юрайт, 2022. – 154 с. – Текст: электронный // ЭБС Юрайт. – URL: https://urait.ru/bcode/492350 (дата обращения: 20.05.2022).

2. Байбородова, Л. В. Основы учебно-исследовательской деятельности : учебник для среднего профессионального образования / Л. В. Байбородова, А. П. Чернявская. — 2-е изд., испр. и доп. — Москва : Издательство Юрайт, 2025. — 221 с. — (Профессиональное образование). — ISBN 978-5-534-10316-8. — Текст : электронный // Образовательная платформа Юрайт [сайт]. — URL: https://urait.ru/bcode/565848 (дата обращения: 23.08.2025).

3. Зуб, А. Т. Управление проектами: учебник и практикум для вузов / А. Т. Зуб. – М.: Юрайт, 2022. – 422 с. – Текст: электронный // ЭБС Юрайт. – URL: https://urait.ru/bcode/489197 (дата обращения: 20.05.2022).

4. Тараканова, Н. И. Техники презентации: практикум: учебное пособие / Н. И. Тараканова. – Тольятти: ТГУ, 2021. – 58 с. – Текст: электронный // Лань: электронно-библиотечная система. – URL: https://e.lanbook.com/book/172630 (дата обращения: 20.05.2022).

5. Управление проектами: учебник и практикум для вузов / А. И. Балашов, Е. М. Рогова, М. В. Тихонова, Е. А. Ткаченко; под общей редакцией Е. М. Роговой. – М.: Юрайт, 2022. – 383 с. –Текст: электронный // ЭБС Юрайт. – https://urait.ru/bcode/468486 (дата обращения: 20.05.2022).

The following regulatory documents are also recommended:

1. Федеральный закон "Об образовании в Российской Федерации" № 273-ФЗ от 29 декабря 2012 года. http://zakon-ob-obrazovanii.ru
2. Федеральный закон о науке и государственной научно-технической политике от 23 августа 1996 № 127-ФЗ (ред. от 31.07.2020).
http://pravo.gov.ru/proxy/ips/?docbody=&nd=102043112
3. Гражданский кодекс РФ. Часть 4. Раздел VII. Права на результаты интеллектуальной деятельности и средства индивидуализации.
https://www.consultant.ru/document/cons_doc_LAW_64629/
4. Федеральный закон об информации, информационных технологиях и о защите информации от 27 июля 2006 г. № 149-ФЗ.
http://pravo.gov.ru/proxy/ips/?docbody&nd=102108264
https://vak.minobrnauki.gov.ru/uploader/loader?type=34&name=3349238001&f=2942
5. Стратегия научно-технологического развития Российской Федерации (утверждена Указом Президента РФ от 01.12.2016 г. № 642)
http://static.kremlin.ru/media/acts/files/0001201612010007.pdf
6. Стандарт отчета о научно-исследовательской работе. ГОСТ 7.32-2017. Введен в действие с 01.07.2018. https://isu.ru/ru/science/standarts/docs/gost_7.32-2017.pdf

b) databases, search and reference systems, and information systems

1. ЭБС ЭЧЗ «Библиотех». Государственный контракт № 019 от 22.02.2011 г. ООО «Библиотех». Лицензионное соглашение № 31 от 22.02.2011 г. Адрес доступа: https://isu.bibliotech.ru/ Срок действия: с 22.11.2011 г. бессрочный.
2. ЭБС «Руконт» Контракт № 98 от 13.11.2020 г.; Акт № бК-5415 от 14.11.20 г. Срок действия по 13.11.2021г. доступ: http://rucont.ru/
3. ЭБС «Издательство Лань». ООО «Издательство Лань». Информационное письмо № 128 от 09.10.2017 г. Срок действия: бессрочный. Адрес доступа: http://e.lanbook.com/
4. ЭБС «Национальный цифровой ресурс «Руконт». ЦКБ «Бибком». Контракт № 04-Е-0343 от 12.11.2021 г. Адрес доступа: http://rucont.ru/
5. ЭБС «Айбукс.ру/ibooks.ru». ООО «Айбукс». Контракт № 04-Е-0344 от 12.11.2021 г.; Акт от 14.11.2021 г. Адрес доступа: http://ibooks.ru
6. Электронно-библиотечная система «ЭБС Юрайт». ООО «Электронное издательство Юрайт». Контракт № 04-Е-0258 от 20.09.2021г. Адрес доступа: https://urait.ru/

VI. MATERIAL AND TECHNICAL SUPPORT FOR THE DISCIPLINE

6.1. Educational and Laboratory Equipment

Наименование специальных помещений и помещений для самостоятельной работы	Оснащенность специальных помещений и помещений для самостоятельной работы	Перечень лицензионного программного обеспечения. Реквизиты подтверждающего документа
Учебная аудитория для проведения занятий лекционного типа	Аудитория оборудована специализированной (учебной) мебелью на 48 студентов и техническими средствами обучения, служащими для представления учебной информации	БАЗОВЫЙ УСТАНОВОЧНЫЙ КОМПЛЕКТ ПО: Office 2007 Russian OpenLicensePack NoLevel AcademicEdition – договор с ЗАО "СофтЛайн Трейд" Tr026664 от 17.05.2007

	большой аудитории Комплект демонстрационного оборудования включает: 1.ПК HP Elite 8300 SFF i5 3470/4Gb/1Tb/DVDRV/kb/m/DOS/Solenoid Lock and Hood Sensor (RUS) 2. Монитор Viewsonic TFT 20" VA2014WM glossy-black 5ms 20 00:1 250cd M/M 3. Проектор Epson EB-1830 4. Колонки активные Genius SP-S110 черные 5. Разветвитель видеосигнала Aten VS92A 2- port VGA Оснащена учебно-наглядными пособиями и электронными презентациями, обеспечивающими тематические иллюстрации по всем темам, указанным в рабочей программе дисциплины	Project Standard 2007, Access 2007 - Программы академического сотрудничества с Microsoft DreamSpark Premium Electronic Software Delivery. – договор с ЗАО "СофтЛайн Трейд" Tr000023480 от 19.05.2015 Операционные системы Windows по лицензионным программам предустановки OEM, Программы академического сотрудничества с Microsoft MSDN AA.- договор с ЗАО "СофтЛайн Трейд" Tr017431 от 15.05.2008 Операционные системы Windows по лицензионным программам предустановки OEM, Программы академического сотрудничества с Microsoft DreamSpark Premium Electronic Software Delivery. – договор с ЗАО "СофтЛайн Трейд" Tr000031723 от 05.08.2015 Антивирусные программы - Права на программы для ЭВМ drWeb Server Security комплексная защита 120Пк (1 лицензию за год) миграция с дозакупкой(LBW-BC-12M-120:119-C4) – договор с ЗАО "СофтЛайн Трейд" 13982/MOC2957 от 22.01.2016 Архиваторы WinRAR: 3.x: Standard Licence - для юридических лиц 100-199 лицензий – договор с ЗАО "СофтЛайн Трейд" №15422/IRK11 от 05.02.2010 Сетевая клиентская часть Права на программы для ЭВМ Windows Server CAL 2012 Russian OLP NL Akademic Edition Device CAL 120 лицензий – договор с ЗАО "СофтЛайн Трейд" 13512/MOC2957 от 29.10.2015 Межсетевой экран, функционал Proxy - Право использования программ для ЭВМ Traffic Inspector GOLD льготная – договор с ЗАО "СофтЛайн Трейд" Tr044356 от 27.08.2013 Право использования программ для ЭВМ Продление Traffic Inspector GOLD Special на 1 год – договор с ЗАО "СофтЛайн Трейд" Tr000112196 от 29.09.2016
Учебная аудитория для проведения занятий семинарского типа	Аудитория оборудована специализированной (учебной) мебелью на 48 студентов и техническими средствами обучения, служащими для представления учебной информации большой аудитории Комплект демонстрационного оборудования включает: 1.ПК HP Elite 8300 SFF i5 3470/4Gb/1Tb/DVDRV/kb/m/DOS/Solenoid	БАЗОВЫЙ УСТАНОВОЧНЫЙ КОМПЛЕКТ ПО: Office 2007 Russian OpenLicensePack NoLevel AcademicEdition – договор с ЗАО "СофтЛайн Трейд" Tr026664 от 17.05.2007 Project Standard 2007, Access 2007 - Программы академического сотрудничества с Microsoft DreamSpark Premium Electronic Software Delivery. – договор с ЗАО "СофтЛайн Трейд"

	Lock and Hood Sensor (RUS) 2. Монитор Viewsonic TFT 20" VA2014WM glossy-black 5ms 20 00:1 250cd M/M 3. Проектор Epson EB-1830 4. Колонки активные Genius SP-S110 черные 5. Разветвитель видеосигнала Aten VS92A 2- port VGA	Tr000023480 от 19.05.2015 Операционные системы Windows по лицензионным программам предустановки OEM, Программы академического сотрудничества с Microsoft MSDN AA.- договор с ЗАО "СофтЛайн Трейд" Tr017431 от 15.05.2008 Операционные системы Windows по лицензионным программам предустановки OEM, Программы академического сотрудничества с Microsoft DreamSpark Premium Electronic Software Delivery. – договор с ЗАО "СофтЛайн Трейд" Tr000031723 от 05.08.2015 Антивирусные программы - Права на программы для ЭВМ drWeb Server Security комплексная защита 120Пк (1 лицензию за год) миграция с дозакупкой(LBW-BC-12M-120:119-C4) – договор с ЗАО "СофтЛайн Трейд" 13982/MOC2957 от 22.01.2016 Архиваторы WinRAR: 3.x: Standard Licence - для юридических лиц 100-199 лицензий – договор с ЗАО "СофтЛайн Трейд" №15422/IRK11 от 05.02.2010 Сетевая клиентская часть Права на программы для ЭВМ Windows Server CAL 2012 Russian OLP NL Akademic Edition Device CAL 120 лицензий – договор с ЗАО "СофтЛайн Трейд" 13512/MOC2957 от 29.10.2015 Межсетевой экран, функционал Proxy - Право использования программ для ЭВМ Traffic Inspector GOLD льготная – договор с ЗАО "СофтЛайн Трейд" Tr044356 от 27.08.2013 Право использования программ для ЭВМ Продление Traffic Inspector GOLD Special на 1 год – договор с ЗАО "СофтЛайн Трейд" Tr000112196 от 29.09.2016
Аудитория для групповых и индивидуальных консультаций, текущего контроля и промежуточной аттестации	Аудитория оборудована специализированной (учебной) мебелью на 11 студентов, 5 рабочих мест, оснащенных компьютерами с подключением к сети «Интернет» и обеспечением доступа в ЭИОС ФГБОУ ВО «ИГУ». 1. 5 рабочих мест Системный блок HP compad dc7800SFF Dual Core PE-2180, 4 Gb DDR2 PC6400, 160GB SATA 3.0 HDD 2. Монитор ЖК (LCD) дисплей 17,0" ViewSonic "VA703m" 1280x1024, 8mc, TCO"03, серебр-черный (D-Sub, MM) 3. Принтер Многофункциональное	БАЗОВЫЙ УСТАНОВОЧНЫЙ КОМПЛЕКТ ПО: Office 2007 Russian OpenLicensePack NoLevel AcademicEdition – договор с ЗАО "СофтЛайн Трейд" Tr026664 от 17.05.2007 Project Standard 2007, Access 2007 - Программы академического сотрудничества с Microsoft DreamSpark Premium Electronic Software Delivery. – договор с ЗАО "СофтЛайн Трейд" Tr000023480 от 19.05.2015 Операционные системы Windows по лицензионным программам предустановки OEM, Программы академического сотрудничества с Microsoft MSDN AA.-

	устройство Hewlett-Packard LaserJet 3055 All-in-One одна штука.	договор с ЗАО "СофтЛайн Трейд" Tr017431 от 15.05.2008 Операционные системы Windows по лицензионным программам предустановки OEM, Программы академического сотрудничества с Microsoft DreamSpark Premium Electronic Software Delivery. – договор с ЗАО "СофтЛайн Трейд" Tr000031723 от 05.08.2015 Антивирусные программы - Права на программы для ЭВМ drWeb Server Security комплексная защита 120Пк (1 лицензию за год) миграция с дозакупкой(LBW-BC-12M-120:119-C4) – договор с ЗАО "СофтЛайн Трейд" 13982/MOC2957 от 22.01.2016 Архиваторы WinRAR: 3.x: Standard Licence - для юридических лиц 100-199 лицензий – договор с ЗАО "СофтЛайн Трейд" №15422/IRK11 от 05.02.2010 Сетевая клиентская часть Права на программы для ЭВМ Windows Server CAL 2012 Russian OLP NL Akademic Edition Device CAL 120 лицензий – договор с ЗАО "СофтЛайн Трейд" 13512/MOC2957 от 29.10.2015 Межсетевой экран, функционал Proxy - Право использования программ для ЭВМ Traffic Inspector GOLD льготная – договор с ЗАО "СофтЛайн Трейд" Tr044356 от 27.08.2013 Право использования программ для ЭВМ Продление Traffic Inspector GOLD Special на 1 год – договор с ЗАО "СофтЛайн Трейд" Tr000112196 от 29.09.2016
Помещение для самостоятельной работы студентов	Оборудовано специализированной (учебной) мебелью на 10 студентов, оснащено компьютерной техникой, подлюченной к сети Интернет и обеспеченной доступом в ЭИОС ИГУ 1. Системный блок Think Centre M80 Series SFF в комплекте: Intel® Core™ i3-540 Clarkdale 2.93GHz / 1333MHz / Dual Core™ / 4M/73W / LGA 1156/32nm/4GB PC3-10600 SDRAM x 2 /250 GB, 7200RPM SATA	БАЗОВЫЙ УСТАНОВОЧНЫЙ КОМПЛЕКТ ПО: Office 2007 Russian OpenLicensePack NoLevel AcademicEdition – договор с ЗАО "СофтЛайн Трейд" Tr026664 от 17.05.2007 Project Standard 2007, Access 2007 - Программы академического сотрудничества с Microsoft DreamSpark Premium Electronic Software Delivery. – договор с ЗАО "СофтЛайн Трейд" Tr000023480 от 19.05.2015 Операционные системы Windows по лицензионным программам предустановки OEM, Программы академического сотрудничества с Microsoft MSDN AA.- договор с ЗАО "СофтЛайн Трейд" Tr017431 от 15.05.2008 Операционные системы Windows по лицензионным программам предустановки OEM, Программы академического

		сотрудничества с Microsoft DreamSpark Premium Electronic Software Delivery. – договор с ЗАО "СофтЛайн Трейд" Tr000031723 от 05.08.2015 Антивирусные программы - Права на программы для ЭВМ drWeb Server Security комплексная защита 120Пк (1 лицензию за год)
	/DVD RW - 10шт 2. Монитор ЖК (LCD) - монитор 20.0 ViewSonic "VA2013w" 1600x900, 5mc, TCO 03, черный (D-Sub) - 10шт 3. Принтер HP LaserJet 5000N, A3, 22ppm, 32 MB, 250&500 sheet feeder, JetDirect 615n prn svr 4. Принтер HP LaserJet 5100th, A3, 22ppm, 32 MB, 250&500 sheet feeder, JetDirect 615n prn svr	миграция с дозакупкой(LBW-BC-12M-120:119-C4) – договор с ЗАО "СофтЛайн Трейд" 13982/MOC2957 от 22.01.2016 Архиваторы WinRAR: 3.x: Standard Licence - для юридических лиц 100-199 лицензий – договор с ЗАО "СофтЛайн Трейд" №15422/IRK11 от 05.02.2010 Сетевая клиентская часть Права на программы для ЭВМ Windows Server CAL 2012 Russian OLP NL Akademic Edition Device CAL 120 лицензий – договор с ЗАО "СофтЛайн Трейд" 13512/MOC2957 от 29.10.2015 Межсетевой экран, функционал Proxy - Право использования программ для ЭВМ Traffic Inspector GOLD льготная – договор с ЗАО "СофтЛайн Трейд" Tr044356 от 27.08.2013 Право использования программ для ЭВМ Продление Traffic Inspector GOLD Special на 1 год – договор с ЗАО "СофтЛайн Трейд" Tr000112196 от 29.09.2016

6.2. Software:

Университет обеспечен необходимым комплектом лицензионного и свободно распространяемого программного обеспечения, в том числе отечественного производства:

1. Базовый установочный комплект по: Office 2010 Услуги по предоставлению права использования программы Microsoft Desktop Edu ALNG LicSAPk OLV E 1Y Acdmc Ent., 39-лицензий для БМБШ ИГУ. Договор № 03-К-1131 от 29.11.2021 КОСГУ 226.4
2. Project Standard 2007, Access 2007 – Подписка ИГУ Azure Dev Tools for Teaching subscription (Visio, Projekt) 1 Year. Microsoft Corporation, One Microsoft Way, Redmond, WA 98052. Expiration Date March 31, 2023.
3. Microsoft Project Professional 2010, Подписка ИГУ Azure Dev Tools for Teaching subscription (Visio, Projekt) 1 Year. Microsoft Corporation, One Microsoft Way, Redmond, WA 98052. Expiration Date March 31, 2023.
4. Операционные системы Windows’7, Windows’10 Услуги по предоставлению права использования программы Microsoft Desktop Edu ALNG LicSAPk OLV E 1Y Acdmc Ent., 39-лицензий для БМБШ ИГУ. Договор № 03-К-1131 от 29.11.2021 КОСГУ 226.4
5. Антивирусные программы - Dr.Web продление Договор № Tr000582689/03-E-0043 от 05 февраля 2021 г. счет № Tr000582689 от 08 февраля 2021
6. Архиваторы WinRAR: 3.x: Standard Licence - для юридических лиц 100-199 лицензий – прилож. №1 к дог №15422/IRK11 ЗАО "СофтЛайн Трейд" от 05.02.2010

7. Сетевая клиентская часть Права на программы для ЭВМ Windows Server CAL 2012 Russian OLP NL Akademic Edition Device CAL 120 лицензий - счет Tr000051059 ЗАО "СофтЛайн Трейд" от 27.10.2015
8. Межсетевой экран, функционал Proxy - Право использования программ для ЭВМ Traffic Inspector GOLD льготная счет Tr005456 ЗАО "СофтЛайн Трейд" от 27.08.2013
9. Traffic Inspector GOLD Special* на 5 лет Договор РСЗ-0000276 от 16.11.2021 КОСГУ 226.4 Продление лицензии

6.3. Technical and Electronic Learning Tools:

Мультимедийные средства и другая техника для презентаций учебного материала:

1. Настольный ПК HP EliteDesk 800 G4 SFF Intel Core i5 8500 (3Ghz)/8192Mb/1000Gb/DVDrw/war 3y/W10Pro +V

2. Монитор ViewSonic 21,5" VA2245a - LED [LED, 1920x1080, 10M: 1 5мс, 170гор, 160вер, D-Sub]

3. Проектор Nec M420X LCD 4200ANSI Lm XGA 2000:1 лампа 3500ч. Eco mode HDMI USB Viewer RJ-45 10W 3,6 кг

4. Колонки Jetbalance JB-115U 2.0 черные (4W)

5. Разветвитель видеосигнала Aten VS92A 2- port VGA

Перечень используемого лицензионного программного обеспечения:

1. Office 2010 по программе академического сотрудничества с Russian Microsoft Desktop Education AllLng License/Software Assurance Pack Academic OLV 1License LevelE Enterprise

2. Project Standard 2007, Access 2007 – по программе академического сотрудничества с Microsoft DreamSpark Premium Electronic Software Delivery.

3. Microsoft Project Professional 2010, Microsoft Visio Professional 2010 по программе академического сотрудничества с Microsoft Imagine Standart Electronic Software Delivery при содействии ЦНИТ ИГУ.

VII. EDUCATION TECHNOLOGIES

In accordance with the requirements of the Federal State Educational Standard (FSES) for the major 27.03.05 Innovatics, specialization "Management of Innovative and IT Projects and Products," the implementation of a competency-based approach involves the extensive use of active and interactive forms of instruction (simulations, role-playing games, case studies) in the educational process, combined with extracurricular work, to develop and enhance students' professional skills.

The teaching of this discipline involves the use of the following educational technologies:

- Conducting classroom sessions using multimedia technologies, audio, and video materials;
- Conducting lectures in the form of problem-based lectures, traditional lectures;
- Employing problem-oriented and student-centered approaches through independent work assignments;
- Testing technologies on the BMSU distance learning platform "Hecadem";
- Applying interactive learning technologies such as group discussions, work in small groups;
- Completion of independent work by students.

The proportion of classes conducted in interactive forms—practical sessions—is determined by the main goal (mission) of the program, the specific characteristics of the student body, and the content of the individual disciplines (as specified by the FSES requirements, taking into account the specifics of the main professional educational program). The proportion of lecture-type classes for

relevant student groups is defined by the corresponding working curriculum in accordance with FSES requirements.

Distance technologies used in the implementation of various types of educational work:

- Individual communication with students via the instructor's email;

- Use of the Irkutsk State University educational portal https://educa.isu.ru/ and the BIBS "Hecadem" platform for organizing ongoing monitoring of academic performance and attendance.

VIII. MATERIALS FOR FORMATIVE AND SUMMATIVE ASSESSMENT

8.1. Assessment Tools for Entry (Diagnostic) Control

Entry testing for the discipline is not conducted, as the basic knowledge in computer science is sufficient for mastering the subject.

8.2. Assessment materials (tools) ensuring diagnostics of the formation of the discipline's competency indicators

№	Formats of Assessment Tools	Assessed themes (sections)	Assessed competencies/ indicators
1	**2**	**3**	**4**
1	Oral questioning	2, 3, 4	UC-1.1; UC-1.2
2	Report	1, 2, 5, 6	UC-1.1; UC-1.2
5	Summative assessment – pass/fail grade with a qualitative mark	1–6	UC-1.1; UC-1.2

8.3. Types of assessment tools used for formative and summative assessment

A list of assessment tools used to evaluate competencies at various stages of their formation, along with a brief description of these tools, is provided in the table below.

№	Assessment Tool	Description of the assessment tool	Format of Assessment Tool
1.	Oral Questioning	A method of assessment in a practical session, organized as a specialized conversation between the instructor and the student on topics related to the discipline being studied. It is designed to determine the extent of the student's knowledge on a specific section, topic, issue, etc. This method may be used to assess students' skills, abilities, and/or practical experience.	Questions for oral questioning
2.	Report	An outcome of independent student work, which is a public presentation of the results of research on a specific educational-practical, educational-research, or scientific problem. It may be used to assess students' knowledge, skills, abilities, and/or practical experience.	Report Topics
3.	Pass/fail grade with a qualitative mark	An assessment tool designed to evaluate a student's knowledge, skills, abilities, and/or practical experience in the discipline. It is conducted orally in the form of a report presenting the results of research on a chosen topic. The presentation time is 10 minutes.	Presentation ppt

8.4. Criteria for assessing competency formation during summative assessment and ongoing assessment

Oral Questioning

Rating Scales	Description	Level of Competency Mastery
86 – 100 points	The student's response reflects the main concepts and theories on the topic, includes their critical analysis and comparison, and illustrates the described theoretical positions with practical examples and empirical data. The student formulates and substantiates their own viewpoint on the stated problems, and presents the material using professional language with an appropriate system of concepts and terms.	High
70 – 85 points	The student's response describes and compares key modern concepts and theories on the topic. The described theoretical positions are illustrated with practical examples, and the student formulates their own viewpoint on the stated problems, though they encounter some difficulties in substantiating it. The material is presented in a professional manner, using an appropriate system of concepts and terms.	Basic
61 – 70 points	The student's response reflects only some modern concepts and theories on the topic, with no analysis or comparison of these theories provided. The student encounters significant difficulty in illustrating theoretical positions with practical examples. The student does not express a personal viewpoint on the stated problems. The material is presented using professional language and the appropriate system of concepts and terms.	Minimal
0 – 60 points	The student's response does not reflect modern concepts and theories on the topic. The student cannot provide practical examples. The material is presented inconsistently and illogically, without the use of concepts and terms relevant to the scientific field. The answer reflects the student's unprofessional understanding of the stated problem; the student is unable to name any scientific theories or define basic concepts.	Competencies not developed

Report

Rating Scales	Description	Level of Competency Mastery
86 – 100 points	The problem addressed in the report/presentation is clearly identified, its relevance is substantiated, a brief analysis of various perspectives on the issue is provided, the author's own position is presented logically, conclusions are formulated, and the topic is fully explored.	High
70 – 85 points	The problem addressed in the report/presentation is identified and its relevance is substantiated; however, the analysis of various perspectives on the issue does not reflect all scientifically grounded positions, the author's own position is presented or the conclusions are formulated with insufficient logical clarity. The topic is covered in a generally adequate manner.	Basic
61 - 70 points	The problem addressed in the report/presentation is identified, but its relevance is not substantiated. An analysis of various perspectives on the issue is absent, and the formation of conclusions lacks logical coherence and a clear personal stance. The topic is only partially addressed.	Minimal
0 – 60 points	The core problem of the report/presentation topic is not addressed; existing viewpoints on the given issue are not presented; a personal stance is absent; conclusions are not formulated.	Competencies not developed

Summative assessment in the form of a *pass/fail grade with a qualitative mark*

Rating Scales		Assessment criteria	Level of Competency Mastery
86 – 100 points	Excellent	Complete coverage of the topic, clear and well-substantiated presentation of results, logical explanation of all research stages, presence of well-founded conclusions and recommendations. Clear structure (introduction, objectives, methods, results, conclusions), logical transitions between slides, well-organized delivery. Informative and neat slides, optimal amount of text, appropriate graphs and illustrations, good design, legible text. Confident, clear speech, good audience engagement, absence of unnecessary pauses or filler words, ability to answer questions. The presentation fits within the allotted time, all key aspects are covered. The student confidently answers questions from the audience.	High
70 – 85 points	good	The topic is covered sufficiently comprehensively; results are presented clearly; conclusions are provided, but some sections require refinement or clarification. The structure is generally followed, though there are minor lapses in the logic of the presentation; slight issues with sequencing may be present. Slides are well-designed, but some contain excessive text or insufficient visual elements. Speech is generally clear, though minor difficulties in articulation may occur; there are slight issues with audience engagement and maintaining listeners' interest. A minor deviation from the allotted time (approximately +/- 2 minutes) is observed, but the main aspects of the topic are addressed. The student responds to audience questions with general confidence.	Basic
61 - 70 points	satisfactory	The topic is covered only partially; results are presented in a fragmentary manner; conclusions are superficial or lack proper substantiation. The structure is not followed, the logic of the presentation is disrupted, and transitions between sections are not always clear. Slides are overloaded with text or poorly legible; visual elements are of insufficient quality. Speech is unclear, with difficulties in articulating the material; there is weak audience engagement, indicating an insufficient level of preparation. There is a significant deviation from the allotted time, with parts of the presentation either omitted or excessively prolonged. The student struggles to answer questions from the audience.	Minimal
0 – 60 points	fail	The topic is insufficiently addressed, results are presented incompletely, and conclusions are absent or incorrect. The structure is not followed; the presentation is chaotic and lacks logical flow. Slides are illegible, contain numerous errors, and lack visual aids or use them incorrectly. Speech is unconfident, with significant difficulties in articulation, a lack of audience engagement, and poor preparation. The time limit is significantly exceeded or the presentation is too short; the presentation is incomplete. The student is unable to answer audience questions.	Competencies not developed

8.5. Description of procedures for conducting summative assessment and evaluating learning outcomes

When conducting summative assessment in the form of a pass/fail grade with a qualitative mark, the instructor may utilize the results of ongoing academic performance assessments throughout the semester. The assessment tools and typical tasks used in ongoing assessment allow for the evaluation of students' knowledge, skills, and mastery/experience in the discipline. In order to incorporate the results of formative assessments, the instructor calculates the average score of the student's competency development level (the sum of the grades received by the student divided by the number of grades). Examples of questions for oral assessment are provided in section 8.6.

Summative assessment in the form of a pass/fail grade with a qualitative mark is conducted as a report-presentation, which presents the results of independently conducted group or individual research. The report-presentation must include the problem, a presentation and justification of the chosen research methods, the obtained results and their interpretation (generalization, analysis, comparison, etc.), conclusions, and reflection on ways to improve one's own research. Responses to audience questions are also taken into account. The grading criteria are presented above.

8.6. Demonstration Examples of Formative Assessment Tools

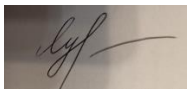
№	Assessment Tool	Examples
1.	Questions for oral Questioning	1. What is research and what role does it play in the innovation process? 2. What are the main types of research and how do they differ? 3. What stages does the scientific research process include? 4. How to determine the relevance of a scientific problem? 5. What are the requirements for formulating a research topic? 6. What is the difference between the goal and objectives of a research project? 7. How to correctly formulate a research hypothesis? 8. How do quantitative and qualitative data differ? 9. What research methods do you know? How to choose the right research method? 10. What methods of data collection exist in scientific research? 11. How can the processing and systematization of obtained data be organized? 12. What are the methods of data presentation? 13. What are the main stages of planning a research project? 14. What factors must be considered when managing risks in research? 15. What ethical norms must be observed when conducting research? 16. What is the connection between the results of scientific research and innovation activity? 17. Why is patenting the results of research work necessary and what advantages does it provide?
2.	Report topics	1. Theoretical and empirical research. 2. Conducting a survey. 3. Conducting an interview. 4. Conducting an experiment. 5. Conducting an observation. 6. Case study method. 7. The role of scientific research in shaping innovative products and technologies. 8. Research as a foundation for the development of innovative startups. 9. The influence of applied research on accelerating technological innovation. 10. Patenting in scientific activity: why it is needed and how it protects innovations.

8.7. List of Questions and Assignments for Summative Assessment

Practical group or individual assignment (student's choice):

1. Choose a research topic. Justify its relevance. List the resources required to conduct this research.
2. Select the methods necessary for its implementation, plan, and prepare the research.
3. Collect data and analyze it. Draw conclusions and provide recommendations for improving the situation, as well as for improving and/or increasing the objectivity of your own research.
4. Present the conducted research in the form of a PowerPoint (ppt) presentation. The evaluation criteria are as follows: appropriate choice of topic and corresponding research methods, depth of research and analysis, alignment of results with the stated problem, logic of presentation, visual design of slides, oral presentation skills, adherence to time limits, and analysis of your own research.

Developed by:



_____ Associate Prof. Luganskaya E.V.

(signature)

The program is developed in accordance with the requirements of the FSES of HE for the major 27.03.05 Innovatics, specialization "Management of Innovative and IT Projects and Products".

The program was reviewed at the meeting of the Department of Strategic and Financial Management on March 21, 2025, protocol No. 9.

Chair N.B. Grosheva