MINISTRY OF SCIENCE AND HIGHER EDUCATION OF THE RUSSIAN FEDERATION

Federal State Budgetary Educational Institution of Higher Education

"IRKUTSK STATE UNIVERSITY"

SAF, Baikal International Business School (Institute)

Strategic and Financial Management Department

APPROVED:
Vice-Rector for Education
_____ A.I. Vokin
February 28, 2025

Syllabus

Discipline Б1.О.02 Project Management

Major: All fields of study

University Degree: Bachelor

Full-time, part-time, extramural (the program is implemented entirely via e-learning and distance educational technologies)

Recommended by Strategic and
Financial Management Department
Protocol № 7 of January 24, 2025

Department Chair N.B. Grosheva

Irkutsk 2025

Table of Contents

I. Goals and objectives of the discipline (module):

The goal of mastering the discipline "Project Management" is the formation of the competence of the UC-2 provided for by the Federal State Educational Standards of Higher Education as a set of knowledge about the main areas of project activities, as well as skills aimed at mastering the methods and tools of project management.

Objectives:

— To acquaint students with the basic terms and definitions of the discipline;

— To give an idea of the concepts used in project management;

— To make a connection between the strategy and mission of the company and projects;

— To teach goal-setting when formulating a project;

— To show basic procedures for managing resources, people, and project timelines;

— To explore WBS Building Concepts;

— To explore resource utilization optimization;

— To show the main difficulties in the implementation of project management;

— To discuss the creation of a project team;

— To study and apply economic and mathematical models for the formation of the revenue and expenditure parts of the project budget;

— To study the rules of project budgeting, budget evaluation, analysis of the earned volume;

— To consolidate theoretical skills in the process of solving practical problems and discussing real enterprises.

II. Place of the Discipline in the CPEP Structure

The academic discipline (module) *Project Management* is a mandatory part of the program.

III. Requirements for the Discipline Learning Outcomes

The process of mastering the discipline is aimed at the formation of competencies of the UC-2 in accordance with the Federal State Educational Standards of Higher Education and the Core Educational Program (CEP) for the Bachelor's degree level.

List of planned learning outcomes in a discipline (module) correlated with indicators of competence achievement

Competency	Competency Achievement Indicator	Learning Outcomes
UC-2	**UC-2.1** Formulates a set of tasks within the framework of the project goal that ensure its achievement	To know: —the place and role of project management in the general system of organizational and economic knowledge —modern methodology and technology of project management —main types and characteristics of projects —main regulations governing project activities —organizational structures of project management To be able: —to determine the goals of the project —to assess the impact of the project on the investment attractiveness of the company —to use project management application packages To possess: —special terminology of project activities —methods of Managerial Decision-Making —methods of analyzing the effectiveness of organizational
	UC-2.2 Chooses the best way to solve problems, taking into account the current legal norms and the available conditions, resources and restrictions	To know: —project management features —main stages of project implementation —state-of-the-art project management software To be able: — to develop a feasibility study for the project

		— to divide activities into separate interdependent tasks — to analyze the financial feasibility and economic efficiency of the project — to draw up a network schedule for the implementation of the project — to form a project budget — to create responsibility matrices To possess: —organizational tools for project management —methods of project analysis and the mathematical apparatus for assessing the effectiveness and risks of the project

IV. Contents and Discipline Structure

The scope of the discipline is 2 credits, 72 hours.

Of these, 72 hours are implemented using e-learning and distance learning technologies.

The form of summative assessment: credit.

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

№	Discipline Section/Theme	Semester	Total Hours	Types of Educational Activities, Including Self-Study, Practical Sessions, and Workload (in hrs)		Formative Assessment Formats; Summative Assessment Formats *(by semesters)*
				Teacher Contact Hrs	Self-Study	
				Lectures		
1	Definition of project management. Basic concepts.	4	4	0,5	3,5	Online test
2	Project Network Schedules	4	4	0,5	3,5	Online test
3	Project Limitations	4	4	0,5	3,5	Online test
4	Organizational structure of projects	4	4	0,5	3,5	Online test
5	Project Resource Management	4	4	0,5	3,5	Online test
6	Stages of the project life cycle	4	4	0,5	3,5	Online test
7	Project processes	4	4	0,5	3,5	Online test
8	Goal Setting and Priority Matrix		4	0,5	3,5	Online test
9	Project costs	4	4	0,5	3,5	Online test
10	Project budget. Budget optimization.	4	4	0,5	3,5	Online test
11	Reduce project implementation time	4	4	0,5	3,5	Online test
12	Earned Value Analysis	4	4	0,5	3,5	Online test
13	Balanced management	4	4	0,5	3,5	Online test

№	Discipline Section/Theme	Semester	Total Hours	Types of Educational Activities, Including Self-Study, Practical Sessions, and Workload (in hrs)		Formative Assessment Formats; Summative Assessment Formats *(by semesters)*
				Teacher Contact Hrs	Self-Study	
				Lectures		
14	Discounting cash flows	4	4	0,5	3,5	Online test
15	Budget planning in MS Excel	4	4	0,5	3,5	Online test
16	Work in MS Project	4	4	0,5	3,5	Online test
				Control 8 hours.		
Total Hours			72	8	56	Credit in the distance learning system

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.)		
4	Definition of project management. Basic concepts.	Study of materials in the course. Tests. Testing	1st week of the semester	3,5	Test	Course in the Educa system
4	Project Network Schedules		Week 2	3,5	Test	Course in the Educa system
4	Project Limitations		Week 3	3,5	Test	Course in the Educa system
4	Organizational structure of projects		Week 4	3,5	Test	Course in the Educa system
4	Project Resource Management		Week 5	3,5	Test	Course in the Educa system
4	Stages of the project life cycle		Week 6	3,5	Test	Course in the Educa system
4	Project processes		Week 7	3,5	Test	Course in the Educa system

Semester	Section, Themes	Self-Study			Assessment tool	Self-Study Educational and Methodological Support
		Type of Self-Study	Deadlines	Load (hr.)		
4	Goal Setting and Priority Matrix		Week 8	3,5	Test	Course in the Educa system
4	Project costs		Week 9	3,5	Test	Course in the Educa system
4	Project budget. Budget optimization.		Week 10	3,5	Test	Course in the Educa system
4	Reduce project implementation time		Week 11	3,5	Test	Course in the Educa system
4	Earned Value Analysis		Week 12	3,5	Test	Course in the Educa system
4	Balanced management		Week 13	3,5	Test	Course in the Educa system
4	Discounting cash flows		Week 14	3,5	Test	Course in the Educa system
4	Budget planning in MS Excel		Week 15	3,5	Test	Course in the Educa system
4	Work in MS Project		Week 16	3,5	Test	Course in the Educa system
Total self-study load (hour)				56		
Of these, using e-learning and distance learning technologies (hour)				56		

4.3. Learning Content

Projects and project management	Concepts and definitions
Enterprise strategy and projects	Mission and strategy of the enterprise. Strategic goals. A system of projects. Project prioritization. Project life cycles.
Project resource planning. Work management, network schedules of projects, analysis of earned volume, project budgets.	Network graphs and Gantt charts. Links between works. Construction and optimization of resource utilization. Definition of the project budget. Evaluation of projects by developed volume. Reduce project time: Reduce costs.
Project team. Social network of the project.	Stakeholders and the interest-influence map. Social network of the project. Responsibility matrix. Approaches to the distribution of roles within the project.
Project Documentation	Passport and charter of the project. Project status reports. Project change reports. Assessment of the probability of project success: PSI-100 method. Project risk assessment methods

4.3.1. List of seminars, practical classes and laboratory work

The curriculum does not provide for hours for seminars and practical classes

4.4. Guidelines for Organizing Student Self-Study

Students' self-study is one of the mandatory types of educational activities that ensure the implementation of the requirements of the Federal State Standards of Higher Education.

According to the requirements of regulatory documents, self-study is an obligatory component of the educational process, as it ensures the consolidation of the knowledge gained in lectures by acquiring the skills of comprehension and expansion of their content, skills for solving urgent problems of the formation of general cultural and professional competencies, research activities, preparation for seminars, laboratory work, passing tests and exams.

Self-study is a set of classroom and extracurricular activities.

Within the framework of the educational process at the university, self-study solves the following tasks:

– consolidation and expansion of knowledge and skills acquired by students during classroom and extracurricular activities, turning them into stereotypes of mental and physical activity;

– acquisition of additional knowledge and skills in the disciplines of the curriculum;

– formation and development of knowledge and skills related to research activities;

– development of orientation and orientation towards the high-quality development of the educational program;

– development of self-organization skills;

– formation of independent thinking, the ability to self-development, self-improvement and self-realization;

– development of skills for effective independent professional theoretical, practical and educational and research activities.

Lecture preparation. The quality of mastering the content of a specific discipline directly depends on the extent to which the student, independently and without external pressure, develops a mindset to acquire new knowledge during lectures that supplements existing knowledge in this discipline. According to the standards, the time for student preparation for a two-hour lecture is at least 0.2 hours.

At the Federal State Budgetary Educational Institution of Higher Education "ISU" (Irkutsk State University), the organization of students' independent work is regulated by the "Regulation on Student Self-Study" adopted by the ISU Academic Council on June 22, 2012.

Specific recommendations for self-study work: all necessary materials are located in the distance course within the Educa system.

The course is designed for 16 weeks of study and consists of 16 modules. Each module contains a video lecture that must be watched attentively. The materials include lecture presentations and additional educational resources. The modules contain tests. To proceed to the materials of the next module, you must complete the test for the previous one.

Summative assessment in the form of a pass/fail credit is conducted through online testing. The final test is located in module 16. All questions for the final test are drawn from the formative tests. We recommend carefully reviewing all tests.

Retaking the final test is not permitted—if failed, the course is considered not completed.

V. Educational, Methodological, and Information Support for the Discipline

The electronic information and educational environment of the university provides students with access to electronic educational publications and electronic educational resources specified in the work programs of disciplines (modules).

Required Reading:

1. Zub, A.T., Project Management: Textbook and Practicum for Higher Educational Institutions. – Moscow: Urait Publishing House, 2021.- 422 p. The text is direct. https://urait.ru/viewer/upravlenie-proektami-469084 .- (ELS "Urait")

2. Balashov, A.I. Project Management: Textbook and Practicum for Higher Educational Institutions / A.I. Balashov, E.M. Rogova, M.V., Tikhonova, E.A. Tkachenko; under the general editorship of E.M. Rogova. – Moscow: Urait Publishing House, 2020. – 383 p. – Immediate text. https://urait.ru/viewer/upravlenie-proektami-449791#page/1 .- (ELS “Urait”)

Databases, Search and Reference Systems, and Information Systems:

In accordance with clause 4.3.4. of the Federal State Educational Standards of Higher Education, students are provided with unlimited access (remote access) to electronic library systems during the entire period of study:

— ELS "Lan Publishing House". Lan Publishing House. Contract No 92 dated 12.11.2018 Act dated 14.11.2018
— ELS ERR "Bibliotech". State Contract No 019 dated 22.02.2011 Bibliotech LLC. License Agreement No 31 dated 22.02.2011 Access address: https://isu.bibliotech.ru/ Validity: from 22.11.2011 indefinitely.
— ELS "National Digital Resource "Rukont". Central Design Bureau "Bibkom". Contract No 91 dated 12.11.2018 Act dated 14.11.2018.
— ELS "Ibuks.ru/ibooks.ru". Ibux LLC. Contract No 90 dated 12.11.2018 Act No 54 dated 14.11.2018
— Electronic library system " ELS Urait". LLC "Electronic Publishing House Urait". Contract No 70 dated 04.10.2018

—the course is provided with electronic materials in the "Educa" system

—the course contains presentations that students can view in the system using the PowerPoint program

—http://elibrary.ru/ is the largest Russian information portal in the field of science, technology, medicine and education, containing abstracts and full texts of more than 14 million scientific articles and publications.

—MS Project software product

VI. Material and Technical Support for the Discipline

6.1. Educational and Laboratory Equipment

Name of Specialized Premises and Self-Study Premises	**Equipment of Specialized Premises and Self-Study Premises**	**List of Licensed Software. Details of Supporting Document**
Lecture hall for lecture-type classes	The hall is equipped with specialized (educational) furniture for 48 students and technical teaching aids for presenting educational information to a large audience. The	BASE INSTALLATION KIT FOR: Office 2007 Russian OpenLicensePack NoLevel AcademicEdition – contract with CJSC "Softline Trade" Tr026664 dated 17.05.2007 Project Standard 2007, Access 2007 - Microsoft DreamSpark Premium Electronic Software Delivery academic collaboration programs. – contract with CJSC "Softline Trade" Tr000023480 dated 19.05.2015 Windows operating systems under OEM pre-installation

	demonstration equipment set includes: 1. PC HP Elite 8300 SFF i5 3470/4Gb/1Tb/DVDRV /kb/m/DOS/Solenoid Lock and Hood Sensor (RUS) 2. Monitor Viewsonic TFT 20" VA2014WM glossy-black 5ms 20 00:1 250cd M/M 3. Projector Epson EB-1830 4. Active speakers Genius SP-S110 black 5. Video signal splitter Aten VS92A 2-port VGA It is equipped with educational visual aids and electronic presentations that provide thematic illustrations for all topics specified in the discipline's syllabus.	licensing programs, Microsoft MSDN AA academic collaboration programs. – contract with CJSC "Softline Trade" Tr017431 dated 15.05.2008 Windows operating systems under OEM pre-installation licensing programs, Microsoft DreamSpark Premium Electronic Software Delivery academic collaboration programs. – contract with CJSC "Softline Trade" Tr000031723 dated 05.08.2015 Antivirus software - Software rights for dr.Web Server Security comprehensive protection for 120 PCs (1 license per year) migration with additional purchase (LBW-BC-12M-120:119-C4) – contract with CJSC "Softline Trade" 13982/MOS2957 dated 22.01.2016 Archivers WinRAR: 3.x: Standard Licence - for legal entities, 100-199 licenses – contract with CJSC "Softline Trade" No. 15422/IRK11 dated 05.02.2010 Network client part: Software rights for Windows Server CAL 2012 Russian OLP NL Academic Edition Device CAL, 120 licenses – contract with CJSC "Softline Trade" 13512/MOS2957 dated 29.10.2015 Firewall, Proxy functionality - Software usage rights for Traffic Inspector GOLD discounted – contract with CJSC "Softline Trade" Tr044356 dated 27.08.2013 Software usage rights for Traffic Inspector GOLD Special renewal for 1 year – contract with CJSC "Softline Trade" Tr000112196 dated 29.09.2016
Room for seminar-type classes	The room is equipped with specialized (educational) furniture for 48 students and technical teaching aids for presenting educational information to a large audience. The demonstration equipment set includes: 1. HP Elite 8300 SFF PC (i5 3470/4GB/1TB/DVDRV/keyboard/mouse/DOS/Solenoid Lock and Hood Sensor (RUS)) 2. Viewsonic TFT 20" VA2014WM glossy-black monitor (5ms, 20:1 contrast ratio, 250 cd/m², M/M) 3. Epson EB-1830 projector 4. Genius SP-S110 black active speakers 5. Aten VS92A 2-port VGA video signal splitter	BASE INSTALLATION KIT FOR: Office 2007 Russian OpenLicensePack NoLevel AcademicEdition – contract with CJSC "Softline Trade" Tr026664 dated 17.05.2007 Project Standard 2007, Access 2007 - Microsoft DreamSpark Premium Electronic Software Delivery academic collaboration programs. – contract with CJSC "Softline Trade" Tr000023480 dated 19.05.2015 Windows operating systems under OEM pre-installation licensing programs, Microsoft MSDN AA academic collaboration programs. – contract with CJSC "Softline Trade" Tr017431 dated 15.05.2008 Windows operating systems under OEM pre-installation licensing programs, Microsoft DreamSpark Premium Electronic Software Delivery academic collaboration programs. – contract with CJSC "Softline Trade" Tr000031723 dated 05.08.2015 Antivirus software - Software rights for dr.Web Server Security comprehensive protection for 120 PCs (1 license per year) migration with additional purchase (LBW-BC-12M-120:119-C4) – contract with CJSC "Softline Trade" 13982/MOS2957 dated 22.01.2016 Archivers WinRAR: 3.x: Standard Licence - for legal entities, 100-199 licenses – contract with CJSC "Softline Trade" No. 15422/IRK11 dated 05.02.2010 Network client part: Software rights for Windows Server CAL 2012 Russian OLP NL Academic Edition Device CAL, 120 licenses – contract with CJSC "Softline Trade" 13512/MOS2957 dated 29.10.2015 Firewall, Proxy functionality - Software usage rights for Traffic Inspector GOLD discounted – contract with CJSC "Softline Trade" Tr044356 dated 27.08.2013 Software usage rights for Traffic Inspector GOLD Special renewal for 1 year – contract with CJSC "Softline Trade" Tr000112196 dated 29.09.2016

Hall for group and individual consultations, formative and summative assessment	The hall is equipped with specialized (educational) furniture for 11 students, 5 workstations equipped with computers connected to the Internet and providing access to the Electronic Information and Educational Environment (EIOS) of FSBEI HE "ISU". Equipment: 1. 5 workstations: System unit HP Compaq dc7800SFF Dual Core PE-2180, 4 Gb DDR2 PC6400, 160GB SATA 3.0 HDD 2. 17.0" ViewSonic "VA703m" LCD display, 1280x1024, 8ms, TCO'03, silver-black (D-Sub, MM) 3. One Hewlett-Packard LaserJet 3055 All-in-One multifunction printer.	BASE INSTALLATION KIT FOR: Office 2007 Russian OpenLicensePack NoLevel AcademicEdition – contract with CJSC "Softline Trade" Tr026664 dated 17.05.2007 Project Standard 2007, Access 2007 - Microsoft DreamSpark Premium Electronic Software Delivery academic collaboration programs. – contract with CJSC "Softline Trade" Tr000023480 dated 19.05.2015 Windows operating systems under OEM pre-installation licensing programs, Microsoft MSDN AA academic collaboration programs. – contract with CJSC "Softline Trade" Tr017431 dated 15.05.2008 Windows operating systems under OEM pre-installation licensing programs, Microsoft DreamSpark Premium Electronic Software Delivery academic collaboration programs. – contract with CJSC "Softline Trade" Tr000031723 dated 05.08.2015 Antivirus software - Software rights for dr.Web Server Security comprehensive protection for 120 PCs (1 license per year) migration with additional purchase (LBW-BC-12M-120:119-C4) – contract with CJSC "Softline Trade" 13982/MOS2957 dated 22.01.2016 Archivers WinRAR: 3.x: Standard Licence - for legal entities, 100-199 licenses – contract with CJSC "Softline Trade" No. 15422/IRK11 dated 05.02.2010 Network client part: Software rights for Windows Server CAL 2012 Russian OLP NL Academic Edition Device CAL, 120 licenses – contract with CJSC "Softline Trade" 13512/MOS2957 dated 29.10.2015 Firewall, Proxy functionality - Software usage rights for Traffic Inspector GOLD discounted – contract with CJSC "Softline Trade" Tr044356 dated 27.08.2013 Software usage rights for Traffic Inspector GOLD Special renewal for 1 year – contract with CJSC "Softline Trade" Tr000112196 dated 29.09.2016
Room for student self-study work	It is equipped with specialized (educational) furniture for 10 students and computer hardware connected to the Internet with access to the ISU Electronic Information and Educational Environment (EIOS). 1. 10 units: ThinkCentre M80 Series SFF system unit kit: 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 / DVD RW 2. 10 units: 20.0" ViewSonic "VA2013w" LCD monitor, 1600x900, 5ms, TCO 03, black (D-Sub) 3. HP LaserJet 5000N printer, A3, 22ppm, 32	BASE INSTALLATION KIT FOR: Office 2007 Russian OpenLicensePack NoLevel AcademicEdition – contract with CJSC "Softline Trade" Tr026664 dated 17.05.2007 Project Standard 2007, Access 2007 - Microsoft DreamSpark Premium Electronic Software Delivery academic collaboration programs. – contract with CJSC "Softline Trade" Tr000023480 dated 19.05.2015 Windows operating systems under OEM pre-installation licensing programs, Microsoft MSDN AA academic collaboration programs. – contract with CJSC "Softline Trade" Tr017431 dated 15.05.2008 Windows operating systems under OEM pre-installation licensing programs, Microsoft DreamSpark Premium Electronic Software Delivery academic collaboration programs. – contract with CJSC "Softline Trade" Tr000031723 dated 05.08.2015 Antivirus software - Software rights for dr.Web Server Security comprehensive protection for 120 PCs (1 license per year) migration with additional purchase (LBW-BC-12M-120:119-C4) – contract with CJSC "Softline Trade" 13982/MOS2957 dated 22.01.2016 Archivers WinRAR: 3.x: Standard Licence - for legal entities, 100-199 licenses – contract with CJSC "Softline Trade" No. 15422/IRK11 dated 05.02.2010 Network client part: Software rights for Windows Server CAL 2012 Russian OLP NL Academic Edition Device CAL, 120 licenses – contract with CJSC "Softline Trade" 13512/MOS2957 dated 29.10.2015

	MB, 250 & 500 sheet feeder, JetDirect 615n print server 4. HP LaserJet 5100th printer, A3, 22ppm, 32 MB, 250 & 500 sheet feeder, JetDirect 615n print server	Firewall, Proxy functionality - Software usage rights for Traffic Inspector GOLD discounted – contract with CJSC "Softline Trade" Tr044356 dated 27.08.2013 Software usage rights for Traffic Inspector GOLD Special renewal for 1 year – contract with CJSC "Softline Trade" Tr000112196 dated 29.09.2016

6.2. Software

The university is provided with the necessary set of licensed and freely distributed software, including domestic production.

The main software is MS Excel.

6.3. Technical and Electronic Training Aids

The methodological concept of teaching provides for the use of technical and electronic means of teaching and monitoring students' knowledge: multimedia presentations, fragments of films.

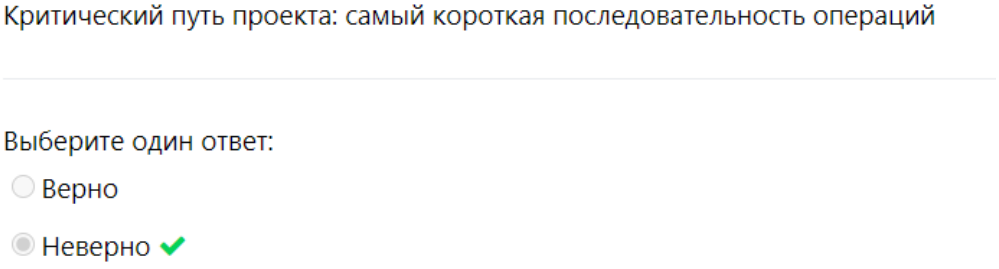
VII. Educational Technologies

The course provides cases from the practice of domestic and foreign companies, business games in the development and evaluation of projects. Students are introduced to real projects from the practice of companies, on the example of which it is necessary to give recommendations on the project itself, the regulations of its work, and optimization.

VIII. Materials for Formative and Summative Assessment

Current control - competencies, the components of which are controlled by the UC-2. Based on the results of independent viewing of the lecture, studying materials on each topic, testing is carried out. The principle of testing passed/failed.

Block 1: 5 questions, to successfully pass the test, you need to answer 3 correctly. An example of a question is given below, all questions are presented in the video course. If the student does not pass the test, a refund is automatically made.



Block 2: 10 questions, to successfully pass the test, you need to answer 6 correctly. An example of a question is given below, all questions are presented in the video course. If the student does not pass the test, a refund is automatically made.

Если у работы ранний старт = 5, поздний старт = 10, то у нее

Выберите один ответ:

- a. резерв времени 10
- b. резерв времени 15
- c. не известен резерв времени
- d. резерв времени 5

Block 3: 10 questions, to successfully pass the test, you need to answer 6 correctly. An example of a question is given below, all questions are presented in the video course. If the student does not pass the test, a refund is automatically made.

Мы хотим построить новый цех по производству автомобилей, но не можем получить кредит в банке. Это:

Выберите один ответ:

- a. стратегическое ограничение
- b. финансовое ограничение
- c. управленческое ограничение

Block 4: 10 questions, to successfully pass the test, you need to answer 6 correctly. An example of a question is given below, all questions are presented in the video course. If the student does not pass the test, a refund is automatically made.

В соответствии с моделью П.Херси и К.Бланшара, хорошая квалификация и способности исполнителя дают возможность

Выберите один ответ:

- a. реализовывать мягкое руководство
- b. делегировать поручение
- c. указывать направление и регулярно проверять отчеты
- d. давать жесткие указания и проверять их выполнение

Block 5: 1 question, to successfully pass the test, you need to answer 1 correctly. An example of a question is given below, all questions are presented in the video course. If the student does not pass the test, a refund is automatically made.

Выберите один ответ:

- a. 98
- b. 93 ✔
- c. 95
- d. 103

Block 6: 10 questions, to successfully pass the test, you need to answer 6 correctly. An example of a question is given below, all questions are presented in the video course. If the student does not pass the test, a refund is automatically made.

Паспорт проекта делается после завершения проекта

Выберите один ответ:

- a. нет, паспорт делается на стадии инициации ✔
- b. да, паспорт не обязательный элемент проекта
- c. да, паспорт делается для подведения итогов проекта

Block 7: 10 questions, to successfully pass the test, you need to answer 6 correctly. An example of a question is given below, all questions are presented in the video course. If the student does not pass the test, a refund is automatically made.

Руководитель проекта обратился за финансированием работ. Это блок работ:

Выберите один ответ:

a.
интеграционные работы

b. операционные работы ✔

c.
коммуникационные работы

Block 8: 10 questions, to successfully pass the test, you need to answer 6 correctly. An example of a question is given below, all questions are presented in the video course. If the student does not pass the test, a refund is automatically made.

Дайте наиболее точное определение слову Стейкхолдеры проекта

Выберите один ответ:

a. собственники проекта

b. клиенты продукта проекта

c. заинтересованные стороны ✔

d. инвесторы проекта

Block 9: 10 questions, to successfully pass the test, you need to answer 6 correctly. An example of a question is given below, all questions are presented in the video course. If the student does not pass the test, a refund is automatically made.

Выравнивание загрузки ресурсов проекта актуально прежде всего для

Выберите один ответ:

- a. трудовых ресурсов ✔
- b. денег
- c. материальных затрат

Block 10: 10 questions, to successfully pass the test, you need to answer 6 correctly. An example of a question is given below, all questions are presented in the video course. If the student does not pass the test, a refund is automatically made.

Выравнивание загрузки ресурсов проекта актуально прежде всего для

Выберите один ответ:

- a. трудовых ресурсов ✔
- b. денег
- c. материальных затрат

Block 11: 7 questions, to successfully pass the test, you need to answer 4 correctly. An example of a question is given below, all questions are presented in the video course. If the student does not pass the test, a refund is automatically made.

Заполните выделенные желтым столбцы. Нормативный срок - это плановые цифры, они совпадают с данными первой таблицы. Итого, сокращение - на сколько максимально мы можем сократить работы (Разница между нормативным и минимальным сроком).

Иллюстрация

Выберите один ответ:

- a. 2 и 9 работа не сокращаются ✔
- b. 1 работа сокращается на 2 месяца
- c. Все работы сокращаются

Block 12: 10 questions, to successfully pass the test, you need to answer 6 correctly. An example of a question is given below, all questions are presented in the video course. If the student does not pass the test, a refund is automatically made.

BCWP это

Выберите один ответ:

- a. бюджетная стоимость планируемых работ
- b. бюджетная стоимость выполненных работ ✔
- c. фактически потраченные на работу деньги

Block 13: 1 task, to successfully pass the test, you need to answer 1 question correctly. An example of a question is given below, all questions are presented in the video course. If the student does not pass the test, a refund is automatically made.

Block 14: 1 task, to successfully pass the test, you need to answer 1 question correctly. An example of a question is given below, all questions are presented in the video course. If the student does not pass the test, a refund is automatically made.

Составить сетевой график, посчитать срок реализации проекта, определить работы, имеющие резервы.

Определить срок проекта

Выберите один ответ:

- a. 21
- b. 10
- c. 25
- d. 20
- e. 15

Block 15: 1 task, to successfully pass the test, you need to answer 1 question correctly. An example of a question is given below, all questions are presented in the video course. If the student does not pass the test, a refund is automatically made.

Вопрос - сколько всего ресурсо-дней надо на проект?

Выберите один ответ:

- a. 60
- b. 23
- c. 24
- d. 51

Block 16: final testing

Tasks for the test:

Task: Have you encountered situations when the project budget was overspent? What were the reasons for such an overexpenditure and can it be avoided?

Make a network schedule:

Stage number	Stage name	Duration (days)	Predecessors
1	Coordination of the work schedule	2	No
2	Prototype	35	No
3	Ordering and production of special components	15	1,2
4	Hull Manufacturing	4	1,2
5	Door production	7	1,2
6	Chassis manufacturing	5	1,2
7	Transmission manufacturing	7	1,2
8	Wheel production	8	1,2
9	Chassis assembly	3	6
10	Wheel assembly	4	8
11	Wheel mounting	2	9,10
12	Chassis Dynamics Testing	2	11
13	Assembling the skeleton of the hull	5	4
14	Door assembly	4	5
15	Fitting the doors to the body	2	13,14
16	Chassis and Hull Compliance Testing	1	12,15
17	Preparing the motor for mounting	2	1,2
18	Motor mounting	4	16,17
19	Assembly of transmissions and steering	4	7,18
20	Hull painting	1	16
21	Installation of electrical wiring	1	20
22	Upholstery installation	2	21
23	Preparation for the installation of weapons	7	3
24	Weapon Installation	4	23,22,19
25	Core Device Testing	2	24
26	Armchair installation	4	25

27	Road Testing	5	26
28	Branding	7	26
29	Weekend Challenges	5	28,27
30	Delivery to the customer and verification of compliance with the scenario	4	29
31	Troubleshooting	7	30

Project: selection, construction and sale of the object (apartments)

Specifics of the project: apartments are not formally residential real estate, i.e. 214-FZ does not apply. Obtaining benefits for the developer: rent and sale. In the process of finding a buyer, renting is possible. They are sold ready to move in. Maintenance costs are quite high, i.e. rental income is not very significant, especially in Irkutsk. As a rule, there are quite a lot of plots for sale, but it is necessary to assess the purity of documents, the profitability and feasibility of the project. Some of the owners are ready to sell for money, some agree to take in squares.

It is necessary to build a network diagram (early and late starts and ends, reserves):

	Works	Duration, days	Predecessors
1	Selection of project options (selection of land plots)	30	-
2	Assessment of the prospects of a particular area	15	1
3	Valuation of investments	15	1
4	Verification of documents	30	1
5	Formalization of relations with the owner	5	2,3,4
6	Attracting investments	15	2,3,4
7	Engaging and using a contractor	300	5,6
8	Purchase of materials	120	5,6
9	Construction	300	5,6
10	Commissioning of the object (state authorities)	35	7,8,9
11	Registration of property rights	30	7,8,9
12	Preparation for rental (finishing, furniture)	45	7,8,9
13	Renting	110	11,12
14	Search for a buyer	90	10,11
15	Execution of the transaction	30	14
16	Withdrawals	5	13,15

Project: Construction and sale of townhouses.

Purchase of a land plot on credit, it is possible to sell the plot in 12 months. The planned project period is 24 months. Under the terms of the loan, the repayment of the principal amount is provided after the sale of the project. Thus, the monthly amount of interest is 250 c.u.

The project provides for 9 works:

Work number	Term, months	Predecessors
1	3	-
2	2	1
3	4	1
4	3	1
5	12	2
6	9	3,4
7	5	5,6
8	4	6
9	2	7,8

Draw a network diagram, determine all the project paths, the project deadline for each of the paths. Define the critical path of the project. The cost of work is determined in c.u. (the exchange rate is pegged to thousand rubles)

Work number	Standard period, months.	Previous Tvenniki	Minimum Turnaround Time	Standard cost	Cost per min.period	Total reduction	Cost per unit of reduction
1		-	2	320	360	1	40
2		1	2	400	400	0	0
3		1	3	590	650	1	60
4		1	2	470	550	1	80
5		2	8	3000	4000	4	250
6		3,4	6	900	1200	3	100
7		5,6	3	250	500	2	125
8		6	2	300	500	2	100
9		7,8	2	600	600	0	0

Determine the standard cost of the project.

Fill in the table (reduction of more than 12 months is not possible)

Months	Indirect	Direct	General
12	1200		1200
13	1300		1300
14	1400		1400
15	1500		1500
16	1600		1600
17	1700	8760	10460
18	1800		1800
19	1900		1900
20	2000		2000
21	2100		2100
22	2200		2200
23	2300		2300
24	2400	6830	9230

Project:

Work number	Duration, days	Predecessors	Estimated cost, thousand c.u.
1	8	-	24
2	6	-	24
3	12	1,2	36
4	7	1,2	21
5	11	1,2	44
6	15	3	45
7	12	4	60
8	3	5	18
9	3	6,7	12
10	7	8	42
11	6	9,10	48
12	34	11	68
13	2	3,12	12
14	5	11	25
15	6	13,14	12

1. Build a network diagram.
2. Define the critical project path(s).
3. Determine the BCWS (assume that the expenditure of funds is proportional – every day).
4. For the first 12 days, there is the following data:

Day	Money spent, thousand c.u.	Work actually performed, for thousand c.u.
1	7	6
2	6	8
3	6	8
4	5	6
5	7	8
6	8	10
7	12	10
8	10	12
9	12	10
10	14	15
11	14	14
12	15	14

Build graphs, determine SPI, CPI, projected project cost

The company "Best Friends of Girls" decided to open a production of jewelry from gold and diamonds in Irkutsk, for a start - rings.

For simplicity of calculations, we will use 1 carat diamonds, the average price is 12000 c.u. per 1 carat, the price of gold per 1 gram is 50 c.u. (but if the price is more or less constant with stones, then gold jumps in price).

For 1 ring, we need 1 diamond and 10 grams of gold (approximately). Obviously, it is not possible to choose the same diamonds weighing 1 carat perfectly, but the price will change proportionally with a slight excess of weight.

We expect to make 1 ring per week, and we need to produce 50 rings first.

We have the following data:

Ring, No	Diamond consumption (carat)	Gold consumption, g	Gold price, c.u.	Days for production
1	1,1	10,5	50	8
2	1,05	10	48	8
3	0,99	11	45	7

4	1,01	10,1	45	7
5	1	10	50	6
6	1,07	10,2	52	6
7	1,02	10,3	54	7
8	0,95	10,4	55	8
9	1,01	10,1	57	8
10	1,04	10	53	7
	10,24	102,6		72

It is necessary to: determine the budget – basic – cost of the ring, draw graphs (BCWS, ACWP, BCWP – by **week** – we believe that we write off the costs in proportion to the volume performed), estimate the average cost of the produced rings, estimate the projected costs for the project – EAC.

Materials for current and intermediate control of students' knowledge:

№ p\n	Type of control	Supervised topics (sections)	Competencies, the components of which are controlled by MC-2
1	Remote Testing	Enterprise strategy and projects	• determine the goals of the project; • the place and role of project management in the general system of organizational and economic knowledge; • main types and characteristics of projects; • project management functions; • organizational tools for project management; • the main regulations governing project activities; • Assess the impact of the project on the investment attractiveness of the company
2	Network Diagram Development in MS Project	Project resource planning. Work management, network schedules of projects, analysis of the earned amount, project budgets.	• modern methodology and technology of project management; • the main stages of project implementation; • develop a feasibility study for the project; • to divide activities into separate interdependent tasks;

			• analyze the financial feasibility and economic efficiency of the project; • draw up a network schedule for the implementation of the project; • form the project budget; • Determine the organizational structure of the project
3	Oral questioning	Project team. Social network of the project.	• Use project management application packages. • special terminology of project activities;
4	Written testing: development of a project passport	Project Documentation	• Methods of Managerial Decision-Making • methods of project analysis and mathematical apparatus for assessing the effectiveness and risks of the project; PP-16 • modern software in the field of project management;

8.1 Tools Used for Summative Assessment

The summative assessment is in the form of a test.

1 BCWP is

- Budget cost of the work performed

- Budget cost of the planned work

- the money actually spent on the work

2 BCWS is

- Budget cost of the work performed

- Budget cost of the planned work

- the money actually spent on the work

3 ACWP is

- Budget cost of the work performed

- Budget cost of the planned work

- the money actually spent on the work

4 SV is

- deviation of the plan from the fact in time

- deviation of the plan from the actual cost

- Work actually performed

5 CV is

- deviation of the plan from the fact in time
- deviation of the plan from the actual cost
- Actual money spent

6 SV and CV

- every project always has it
- may not be present during the ideal execution of the project
- if there is, then only at the same time

7 If the CPI is greater than 1, then

- the project is being implemented with overspending of money
- The project is implemented with money savings
- The project is being implemented with time overruns
- the project is implemented with time saving

8 If the SPI is greater than 1, then

- the project is being implemented with overspending of money
- The project is implemented with money savings
- The project is being implemented with time overruns
- the project is implemented with time saving

9 SPI =

- BCWS/BCWP
- BCWS/ACWP
- BCWP/ACWP
- BCWP/BCWS

10 CPI =

- BCWS/BCWP
- BCWS/ACWP
- BCWP/ACWP
- BCWP/BCWS

Developed by:

Dean of SAF Grosheva N.B.

(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".

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Chair of the Department  Grosheva N.B.