Ministry of Science and Higher Education of the Russian Federation

Federal State Budgetary Educational Institution of Higher Education
Perm National Research Polytechnic University

APPROVED BY
Pro-rector for Academic Affairs
_____ N.V. Lobov
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ACADEMIC COURSE WORKING PROGRAM

Academic course: Modern strategic analysis
(Name)

Form of education: Full-time
(Full-time /full-time - correspondence/correspondence)

Level of higher education: Master's degree
(Bachelor's program/specialist program/Master's program)

Total labour intensiveness: 180 (5)
(Hours (CU))

Training program (degree): 38.04.01 Economics
(Code and denomination of degree)

Direction: Oil and Gas Enterprise Management and Economics
(Title of curriculum)

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1. General Provisions

1.1. Goals and Objectives of the Course

Formation of comprehensive understanding of the strategic management of planning production resources and production capacities at an industrial enterprise

1.2. Studied Objects of the Course

- methodological tools for analyzing enterprise external environment, the resource potential of industrial enterprises
- technology for production programs development based on the strategic and tactical horizons of management decision-making and management activities related to its implementation

1.3. Starting Conditions

Unstipulated

2. Planned Results of the Course Training

Competence	Indicator's Index	Planned Results of the Course Training (to know, to know how, to master)	Indicator of Attaining Competence which the planned results of training are correlated with	Means of Assessment
PC-3.3.	**AI-1**$_{PC-3.3}$	**Knows** features of production processes, methods of their organization in terms of organizational and managerial structure, methods of strategic and tactical planning at industrial enterprises	**Knows** production processes, methods of their organization and workplaces, production, organizational and managerial structure, methods of strategic and tactical planning at oil and gas enterprises	Test
PC-3.3.	**AI-2**$_{PC-3.3}$	**Is able to** organize work of formation of the hierarchy of forecast: production process at the strategical and tactical horizons of making managerial decisions in order to define market needs for the products of industry, enterprise needs for production resources and facilities; to ensure a high level of production capacity for providing smooth work of	**Is able to** organize work of formation of the hierarchy of production process forecast at the strategical and tactical horizons of making managerial decisions in order to define market needs for the products of oil and gas industry, enterprise needs for production resources and facilities; provide smooth work of the enterprise	Practical review

		the enterprise and smooth product release according to the production programmes, contractual obligations, graphical schedules	and smooth product release according to the production programmes, contractual obligations, graphical schedules; organize the efficient load of oil and gas equipment	
PC-3.3.	**AI-3$_{PC-3.3}$**	**Has skills** of the correct combination of economic and administrative methods of management, material and moral stimulations of productivity enhancement	**Has skills** of the correct combination of economic and administrative methods of management, material and moral stimulations of productivity enhancement as well as client-centered strategic and tactical management of configurations of oil and gas industry products on the grounds of long-term and medium-term forecasts of market development	Test

3. Full time and forms of academic work

Form of academic work	Hours in all	Distribution in hours according to semesters
		Number of semester
		4
1. Holding classes (including results monitoring) in the form: 1.1. Contact classwork, including:	72	72
- lectures (L)	28	28
- laboratory work (LW)	-	-
- practice, seminars and/or other seminar-type work (PW)	38	38
- control of self-work (CSW)	6	6
- test	-	-
1.2. Students' self-work (SSW)	108	108
2. Intermediate attestation	-	-
Exam	-	-
Grading test	9	9
Test (Credit)	-	-
Course Project (CP)	-	-
Course Work (CW)	-	-
Total Course Labour Intensiveness	180	180

4. Course outline

Name of the units with the course outline	Full time of classroom activity in hours according to the forms			Full time of extracurricular work in hours according to the forms
	L	LW	PW	SSW
4 semester				
General concept of strategic management and strategic analysis	14	0	18	50
Introduction. The subject of the course; literature for self-study, requirements for classroom and independent work of students. The main areas of research in strategic management and assessment of the competitiveness of oil and gas industry enterprises. Topic 1. Strategic analysis in the organization's management system. Basic definitions, concepts and indicators of strategic analysis of the oil and gas industry enterprise (management, strategy, strategic analysis). Tasks of strategic analysis. Types of strategies. Classification of strategies. The sequence of strategic management (analysis of the environment, mission, vision, goals, strategy development, strategy implementation). Basic principles of strategy formation. Topic 2. The concept of sustainable development and greening. Features of the modern approach to the formation of enterprise development strategies in conditions of uncertainty, geopolitical shifts, economic and environmental security on a global scale. Methods and criteria for evaluating a sustainable development strategy. Topic 3. Strategic and tactical horizons management decision-making. Tasks and factors for analyzing the environment of the enterprise in relation to the strategic and tactical horizon of forecasting. Factors of successful business of the company in a competitive environment. Stakeholder theory in strategic planning and principles of forming an information database for strategic analysis. Sources of information about business environment and composition of stakeholders and elements of business environment. A question list for the review of the subspaces of external environment of the enterprise and their elements. Topic 4. Modern methods of strategic analysis. Basic methods of strategic analysis. GETS-analysis. SNW-analysis. Application of SWOT-analysis. Assessment of the strengths and weaknesses of the enterprise under the opportunities and threats of external environment. Matrix of primary strategic SWOT-analysis. Method for creating an environment profile. Qualitative and quantitative PEST-analysis. GAP-				

Name of the units with the course outline	Full time of classroom activity in hours according to the forms			Full time of extracurricular work in hours according to the forms
analysis. DataMining methods. Characteristics of the "Ishikawa Diagram" method. Topic 5. Analysis of external environment. Stages of the analysis of the external environment. Characteristics of factors of the external macroeconomic environment. Stages of analysis of the market environment in the industry. Principles of market segmentation. Analysis of consumer motivation. The VALS (Values and Life style) method. Stages of the product life cycle. McKinsey models and the Boston Matrix (Boston Consulting Group). The main criteria for analysis in the McKinsey model. Analysis of the competitive environment. Areas of analysis of the strengths and weaknesses of the competitor. Analysis of driving forces. Characteristics of the driving forces of the industry development. Indicators of competitiveness in terms of technical and economic parameters.				
Strategic analysis of the production potential of the oil and gas industry	14	0	20	58
Topic 6. Business model of the enterprise The business model of the enterprise and its constituent elements. Methods for determining the potential of business model elements on the strategic and tactical horizons of management decision-making. Features of the formation of elements of the business model depending on the production program of the enterprise. Topic. 7. Strategic analysis of the organizational and management structure Parameters that influence the choice of the strategy development option, the algorithm for developing the strategy elements and evaluating the organizational and managerial structure from the perspective of various schools (schools of design, planning, positioning, entrepreneurship, cognitive school). Features of the formation of motivational mechanisms based on learning tools, power, corporate culture, and the configuration of subordination systems. Topic. 8. The Universal System of Balanced Performance Indicators model A balanced scorecard. The training cycle «Bulb». The Deming management cycle. Industry-specific features of identifying key success factors, core values, goals, and performance indicators. A model for structuring quality functions (Quality House). Risk management methods. The formation of backward linkages. Topic 9. Assessment of the competitive status of the enterprise Features of methods for assessing the competitiveness and competitive status of the enterprise. Application of				

Name of the units with the course outline	Full time of classroom activity in hours according to the forms			Full time of extracurricular work in hours according to the forms
the methodology for oil and gas industry enterprises. Creating constraints for the selection of analysis objects. The benchmarking method. Principles for choosing strategies for step-by-step improvement.				
Total	28	0	38	108
Total	28	0	38	108

Topics of exemplary practical work

Sl.№	Topic of practical (seminar) work
1	Acquisition of skills in the formation and analysis of strategic management elements
2	Sustainable development assessment methods
3	Application of business environment analysis methods
4	Application of strategic analysis methods
5	Application of external environment analysis methods
6	Creation of enterprise business model
7	Analysis of enterprise organizational and managerial structure
8	Creation of the balanced scorecard methodology
9	Application of competitive status and benchmarking assessing methods

Topics of exemplary laboratory practice – Unstipulated

Sl. №	Topic of laboratory work

5. Organizational and Pedagogical Conditions

5.1. Educational Technologies Used for Competences Formation

Holding lectures in the discipline is based on the active method of training in the process of which students are not passive but active participants of the lesson answering questions of the teacher. Teacher's questions are aimed at activating the process of learning material as well as at the development of logical thinking. The questions stimulating associative thinking and connecting new material with the previous one are identified by the teacher in advance.

Practical lessons are hold by realization of the method based on active training: problem areas are determined, groups are formed. The following aims are pursued in the process of practical education: use of definite disciplines knowledge and creative methods in solving problems and decision-making; students' skill-building of teamwork, interpersonal communication and development of leadership skills; consolidation of the basic theoretical knowledge.

Laboratory classes are based on an interactive learning method in which students communicate not only with the teacher but also with each other. At the same time, students ' activity in the learning process dominates. The teacher's place in interactive classes is reduced to orienting students ' activities to achievement of the goals of studies. Interactive lectures, group discussions, role-playing games, training sessions, and analysis of situations and

simulation models are used in academic studies

5.2. Students' Manual for the Course Study

Learning the course students are recommended to fulfill the following positions:

1. Learning of the discipline should be done systematically.
2. After learning one of the course unit with the help of the text-book or lecture notes it is recommended to reproduce in memory the basic terms, definitions, notions of the unit.
3. Special attention should be paid to the reports on practical studies, laboratory works and individual complex tasks for self-work.
4. The topic of questions studied individually is given by the teacher at the lectures. Also the teacher refers to the literary resources (first of all, to the newly published in periodicals) in order the students understand the problems touched on the lectures in detail.

6. List of Teaching Materials and Information Supply for Students' Self work in the Discipline

6.1. Paper-based courseware

Sl.№	Bibliographic entry (author, title, mode of publication, place, publishing house, year of publication, number of pages)	Number of copies in the library
1. Basic literature		
1	Молодчик А.В. Менеджмент: стратегия, структура, персонал, знание : учебное пособие для вузов / А.В. Молодчик , М.А. Молодчик. - М.: ГУ ВШЭ, 2005.	221
2	Стратегический менеджмент : учебник для вузов / Под ред. А.Н. Петрова. - СПб: Питер, 2008.	5
2. Additional literature		
2.1. Educational and scientific literature		
1	Быкова Е. С. Производственный менеджмент : учебное пособие для вузов / Е. С. Быкова. - Пермь: Изд-во ПНИПУ, 2012.	5
2	Фатхутдинов Р. А. Стратегический менеджмент : учебник для вузов / Р. А. Фатхутдинов. - Москва: Дело, 2005.	1
3. Students' manual in mastering discipline		
1	Фатхутдинов Р. А. Управление конкурентоспособностью организации : практикум / Р. А. Фатхутдинов. - Москва: Маркет ДС, 2008.	8
4. Teaching and learning materials for students' self work		
1	Лобова Е.С. Современный стратегический анализ: методика комплексной оценки стратегии формирования продуктового портфеля с учетом институциональных рисков внутренней и внешней среды промышленного предприятия/ авт.-сост. Е.С. Лобова. - Пермь: Изд-во Перм. нац. исслед. политехн. ун-та, 2019. -42с.	10

6.2. Electronic Courseware

Kind of literature	Name of training tool	Link to information resource	Accessibility of EBN (Internet/local net; authorized free assess)
Supplementary literature	Management in Russia and abroad	http://mevriz.ru	Internet free assess
Supplementary literature	Russian Journal of Management	http://rjm.ru	Internet free assess
Supplementary literature	Manager	http://upravlenets.usue.ru	Internet free assess
Supplementary literature	Современный стратегический анализ : Учебное пособие / Е. Ю. Кузнецова [и др.]. - Екатеринбург: Уральский федеральный университет, ЭБС АСВ, 2016.	http://elib.pstu.ru/Record/iprbooks87365	Internet free assess
Additional literature	Современный стратегический анализ : Методические указания к выполнению расчетнографической работы / сост. И. А. Сбоева. - Йошкар-Ола: Поволжский государственный технологический университет, 2015.	http://elib.pstu.ru/Record/iprbooks88149	Internet free assess
Basic literature	Молодчик А. В. Теория и практика формирования саморазвивающейся организации / А. В. Молодчик. - Екатеринбург: Изд-во ИЭ УрО РАН, 2001.	http://elib.pstu.ru/Record/RUPSTUbooks50973	Internet free assess
Students' manual in mastering discipline	Масленченков Ю. С. Стратегический и кризисный менеджмент фирмы : учебное пособие для вузов / Ю. С. Масленченков, Ю. Н. Тронин. - Москва: Дашков и К, 2005.	http://elib.pstu.ru/Record/RUPSTUbooks73153	Internet free assess

6.3. License and Free Distributed Software used in the Course Educational Process

Type of Software	Software branding
OS	Windows 10 (Azure Dev Tools for Teaching)
Office Applications	Adobe Acrobat Reader DC
Image processing software	Corel CorelDRAW Suite X4
General purpose application software	Mathematica Professional Version (license L3263-7820*)

General purpose application software	Microsoft Office Visio Professional 2016 (Azure Dev Tools for Teaching)
General purpose application software	WinRAR (license №879261.1493674)
Management systems for projects, research, development, design, modeling and implementation	Autodesk AutoCAD 2019 Education Multi-seat Stand-alone

6.4. Modern Professional Data bases and Inquiry Systems Used in the Course Educational Process

Branding	Reference to information resource
Scopus database	https://www.scopus.com/
Web of Science Database	https://www.webofscience.com/
Scientific electronic library database (eLIBRARY.RU)	https://elibrary.ru/
Scientific Library of the Perm National Research Polytechnic University	https://lib.pstu/
Lan Electronic Library System	https://e.lanbook.com/
Electronic library system IPRbooks	https://www.iprbookshop.ru/
Information resources of the Network ConsultantPlus	https://www.consultant.ru/
Company database EBSCO	https://www.ebsco.com/

7. Logistics of the Course Educational Process

Type of classes	Name of the necessary basic equipment	Number of units
Practice	projector apparatus	1

8. Fund of the Course Evaluating Tools

Described in a separate document

Ministry of Science and Higher Education of the Russian Federation
Federal State Budgetary Educational Institution of Higher Education
"Perm National Research Polytechnic University"

FUND OF ESTIMATING TOOLS
For students' midterm assessment in the discipline «Modern strategic analysis»
Supplement to the Academic Course Working Program

Training program	38.04.01 Economics
Direction (specialization) of educational program	**Oil and Gas Enterprise Management and Economics**
Graduate qualification	Master's degree
Graduate academic chair	Economics and Industrial Production Management
Form of study	Full-time studies

Year: 1 **Semester**: 1

Labour intensiveness

Credits according to curriculum	5 CU
Hours according to curriculum	180 h.

The form of midterm assessment:
Grading test 4 semesters

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Fund of estimating tools for midterm assessment of students' learning the subject «Modern strategic analysis» is the part (supplement) to the academic course working program. Fund of estimating tools for midterm assessment of students' learning the discipline has been developed in accordance with the general part of the fund of estimating tools for midterm assessment of the basic educational program which determines the system of the midterm assessment results and criteria of putting marks. Fund of estimating tools for midterm assessment of students' learning the subject determines the forms and procedures of monitoring results and midterm assessment of the subject leaning by the students.

1. List of controlled results of studying discipline, objects of assessment and forms of control.

According to the Academic Course Working Program mastering course content is planned during one semester (the first semester of curriculum) and is divided into two educational modules. Classroom activities, lectures and practical work as well as students' self-work are provided for every module. In the frames of mastering course content such competences as *to know, to be able, to master* pointed out in the ACWP are formed. These competences act as the controlled results of learning the discipline «Modern strategic analysis» (Table 1.1).

Monitoring of the acquired knowledge, abilities and skills is made in the frames of continuous assessment, progress check and formative assessment in the process of studying theoretical material, reports on practical works and during examination. Types of control is given in Table 1.1

Table 1.1. List of controlled results of learning the discipline

Controlled results of learning the discipline (ЗУВы)	Type of control				
	Continuous assessment		Progress check		Formative assessment
	D	AC	LWR /PWR	T/CW	Exam
Acquired knowledge					
K.1 Knows features of production processes, methods of their organization in terms of organizational and managerial structure, methods of strategic and tactical planning at industrial enterprises	D	AC		CW	TQ
A.1 Is able to organize work of formation of the hierarchy of forecast: production process at the strategical and tactical horizons of making managerial decisions in order to define market needs for the products of industry, enterprise needs for production resources and facilities; to ensure a high level of production capacity for providing smooth work of the enterprise and smooth product release according to the production programmes, contractual obligations, graphical schedules			CT	CW	CT
B.1 Has skills of the correct combination of economic and administrative methods of management, material and moral stimulations of productivity enhancement	D				CT

D – topic discussion; AC – colloquium (discussion of theoretical material, academic conference); CT – case-task (individual task); LWR – report on laboratory work; PWR – report on practical work; T/CW – progress check (control work); TQ – theoretical question; PT – practical task; CT – complex task of grading test.

Final assessment of the learned discipline results is the midterm assessment which is made in the form of test taking into consideration the results of the running and progress check.

2. Types of control, standard control tasks and scales of learning results assessment

Continuous assessment of the academic performance is aimed at maximum effectiveness of educational process, at monitoring students' specified competencies formation process, at increase of learning motivation and provides the assessment of mastering the discipline. In accordance with the regulations concerning the continuous assessment of the academic performance and midterm assessment of students taught by the educational programs of Higher education – programs of the Bachelor's Course, Specialists' and Master's Course the next types of students' academic performance continuous assessment and its periodicity is stipulated in PNRPU:

- acceptance test, check of the student's original preparedness and his correspondence with the demands for the given discipline learning;
- continuous assessment of mastering the material (the level of mastering the component "to know" defined by the competence) at every group studies and monitoring of lectures attendance;
- interim and progress check of students' mastering the components "to know" and "to be able" of the defined competences by computer-based or written testing, control discussions, control works (individual home tasks), reports on laboratory works, reviews, essays, etc.

Discipline progress check is conducted on the next week after learning the discipline module, while the interim control is made at every monitoring during the discipline module study;

- interim assessment, summarizing of the current students' performance at least once a semester in all disciplines for every training program (specialty), course, group;
- retained knowledge control.

2.1. Continuous assessment of education

Continuous assessment of learning is made in the form of discussion or selective recitation on every topic. According to the four-point system the results of assessment are put into the teachers' note-book and are considered in the form of integral mark in the process of the midterm assessment.

2.2. Progress check

For the complex assessment of the acquired knowledge, abilities and skills (Table 1.1) it is made the progress check in the form of report on practical works and midterm control works (after learning every discipline module).

2.2.1. Presentation of practical work

Presentation of practical work is made by the student individually or by the group of students. Standard scale and criteria of assessment are given in the general part of FET of the educational program.

2.2.2. Midterm control work

According to ACWP 2 midterm control works (CW) is planned to be realized after learning the educational modules of the discipline by the students.

The first CW is realized with respect to the module 1 "General concept of strategic management and strategic analysis", the second CW – with respect to the module 2 "Strategic analysis of the production potential of the oil and gas industry".

Standard tasks of the first CW:

1. Methods and models of the external environment analysis.
2. Product life cycle analysis based on the matrix of the Arthur D. Little consulting company
3. Analysis of the enterprise strengths and weaknesses by SWOT analysis.
4. Research of the main strategic directions of the company's development by the Shell matrix.
5. Features of the strategic analysis of the market evolution stages (The Hofer Matrix)
6. Application of the Boston Consulting Group (BCG) matrix for strategic analysis of industry enterprises.

Standard tasks of the second CW:

1. 1. Competitive strategies and competitive tactics of enterprises in mechanical engineering.
2. Product analysis of the enterprise industry by ABC analysis.
3. Benchmarking: its role and significance.
4. A balanced scorecard as a tool for controlling the strategy implementation.

Standard scale and criteria of the results of the midterm control work assessment are given in the general part of FET of the educational program.

2.3. Fulfillment of the complex individual self-work task

Individual complex task for the students is used for assessment their skills and abilities acquired in the process of learning the discipline in which the course project or course paper is not stipulated.

1. Selection of indicators for quantitative and qualitative characteristics of projects
2. Formation of the function of the integral indicator of the project evaluation
3. The relative scoring of the characteristics of the projects
4. Identifying and evaluating the interests of groups of project participants in the management decision-making process
5. Calculation of indicators for a comprehensive assessment of the level of satisfaction of the interests of groups of participants in the decision-making process
6. Assessment of the concordance of internal and external project environments
7. Calculation of the probability of institutional risks of projects
8. Assessing the complexity and uncertainty of the business environment
9. Creating an optimal product portfolio

Standard scale and criteria of assessment of the individual complex task presentation are given in the general part of FET of the educational program.

2.4. Midterm assessment (final control)

Admission for midterm assessment is made according to the results of continuous assessment and progress check. Preconditions for admittance are successful presentation of all practical works and positive integral estimation with respect to the results of continuous assessment and progress check.

2.4.1. Midterm assessment procedure without additional evaluation testing

Midterm assessment is made in the form of test. Credit on the discipline is based on the results of the previously fulfilled by the student individual tasks on the given discipline.

Criteria of putting the final mark for the components of competences in the process of midterm assessment made in the form of test are given in the general part of FET of the educational program.

2.4.2. Midterm assessment procedure followed by evaluation testing

In definite cases (for example, in case of re-attestation of the discipline) midterm assessment in the form of the test on this discipline can be made as the ticket-based evaluation test. Every ticket includes theoretical questions (TQ) aimed at control of the acquired knowledge, practical tasks (PT) aimed at mastered abilities, and complex tasks (CT) aimed at control of the acquired skills of all declared competences.

The ticket is formed so that the included questions and practical tasks could estimate the level of maturity of **all** declared competences.

2.4.2.1. Standard questions and tasks the discipline testing

Standard questions for the acquired knowledge control:

1. Assessment of the instability of the external environment and the choice of organizational and managerial structure
2. Strategic management and state regulation of the economy.
3. Tactical planning and production plan of the enterprise
4. Corporate (portfolio) strategies of the enterprise.
5. The production potential of the enterprise.
6. Assessment of uncertainty and risk in the strategic analysis of industry enterprises.
7. The strategy of sustainable development and the principles of greening.
8. The method of SWOT-analysis.
9. Analysis of the value chain for the industry enterprises.
10. Features of the formation of a system of balanced indicators
11. The methodology of benchmarking in strategic analysis.

Standard questions and practical tasks for the mastered abilities control:

1. Application of the M. Porter matrix for industry enterprises activities
2. Application of the BCG model in strategic management
3. Application of the GE/McKinsey model to justify the strategic activities of enterprises
4. Application of the Shell/DPM model for industry enterprises
5. Analysis of an industrial enterprise strategy factors
6. Features of strategic analysis of market evolution stages (The Hofer Matrix)

7. Features of the Ansoff matrix application
8. The field of possible strategies of D. Abel (Abel matrix).
9. Strategic approach on base of scenario development (scenario method).
10. Application of the Pareto principle "80/20" in strategic analysis

Standard complex tasks for the acquired skills control:

1. Creation of a project plan for enterprise business model.
2. Evaluate a company competitive status
3. Make a qualitative and quantitative risk analysis of the product strategy project

2.4.2.2. Scales of test assessment of educational achievements

Evaluation of discipline achievements in the form of maturity level of the components *to know, to be able, to master* of the declared competences is made according to the four-point assessment scale.

Standard scale and criteria of estimating educational achievements in the process of testing for the components *to know, to be able, to master* are given in the general part of FET of educational program.

3. Assessment criteria for components and competences level of maturity

3.1. Assessment of competences components level of maturity

While estimating the level of competences maturity by selective control in the process of testing it is considered that *the mark got for the components of the examined competence is combined with the corresponding component of all competences formed in the frames of the given academic course.*

General assessment of maturity level of all competences is made by aggregation of marks got by the student for each component of the formed competences taking into account the results of continuous assessment and progress check in the form of integral mark according to the four-point scale. All control results are put into the assessment sheet by the teacher according to the results of midterm attestation.

The form of the assessment sheet and requirements for its completion are given in the general part of FET of the educational program.

While making the final assessment of the midterm attestation in the form of test standard criteria given in the general part of FET of the educational program are used.