# The list of academic disciplines of the university component

6B11 - Services
(Code and classification of the field of education)

6B112 - Occupational health and safety
(Code and classification of the direction of training)

1020
(Code in the International Standard Classification of Education)

B094 - Sanitary and preventive measures
(Code and classification of the educational program group)

6B11201 - Safety and Environmental Protection
(Code and name of the educational program)

(Level of preparation)

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## Developed
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Chairman of the Academic Council of the University Orynbekov D.R.

## Bases of economics, law and ecological knowledge

| | |
|---|---|
| Discipline cycle | General educational disciplines |
| Course | 1 |
| Credits count | 5 |
| Knowledge control form | Examination |

### Short description of discipline

*The integrated discipline includes the main issues and principles in the field of fundamentals of law and anti- corruption culture, economics, entrepreneurship and leadership, ecology and life safety. Features of the use of regulatory legal acts, the ability to use the business, ethical, social, economic, entrepreneurial and environmental standards of society. Specifics of environmental-legal, economic, entrepreneurial relations, leadership qualities and principles of combating corruption.*

### Purpose of studying of the discipline

*It consists in studying the basic patterns of the functioning of living organisms, the biosphere as a whole and the mechanisms of their sustainable development under the conditions of anthropogenic impact and emergency situations; in understanding the concept of corruption, the legitimacy of the fight against it, the content of the state penal policy; in the formation of students` basic fundamental stable knowledge on the basics of economic theory, in instilling the skills and abilities of economic thinking; in introducing students to the theory and practice of entrepreneurship, to the basics of creating their own business; in the formation of theoretical knowledge and practical skills for the development and improvement of leadership qualities.*

### Learning Outcomes

*ON1 Demonstrate socio-cultural, economic, legal, environmental knowledge, communication skills, apply information technologies taking into account current trends in the development of society.*

### Learning outcomes by discipline

*  analyzes the issues of safety and conservation of the natural environment as the most important priorities of life;*
*  demonstrates knowledge of the fundamentals of nature management and sustainable development, assesses the impact of man-made systems on the environment;*
*  shows knowledge of the main regulatory legal acts of the Republic of Kazakhstan, their understanding and application;*
*  shows knowledge of the patterns of development of economic processes, clearly formulates his own position, finds and clearly sets out arguments in its defense;*
*  is able to characterize the types of entrepreneurial activity and the entrepreneurial environment, draw up a business plan, create an entrepreneurial structure and organize its activities;*
*  knows the fundamental provisions about the role of leadership in managing large and small social groups.*

### Prerequisites

*School course*

### Postrequisites

*Basic and profile disciplines of the EP*

## Introduction to the profession

| | |
|---|---|
| Discipline cycle | Basic disciplines |
| Course | 1 |
| Credits count | 3 |
| Knowledge control form | Examination |

### Short description of discipline

*The discipline is aimed at studying the basic concepts, terms and definitions in the field of life safety, environmental protection, fire safety; ensuring personal safety and health protection; objective patterns of occurrence of dangerous and harmful factors in the biosphere and technosphere; anatomical and physiological human abilities to tolerate exposure to dangerous and harmful factors in normal and emergency situations; means of formation comfortable and safe living conditions and preservation of the natural environment.*

### Purpose of studying of the discipline

*Knowledge of the theoretical and practical foundations of safety, the ability to recognize and assess hazards, identify and implement methods of reliable protection against them, mastery of the main principles-safety priorities in solving any technical problems in the field of scientific research, design developments, production and management.*

### Learning Outcomes

*ON3 To carry out professionally-oriented activities in the field of life safety and environmental protection.*
*ON4 To understand the essence and social significance of the profession, to put into practice the knowledge of world science in the field of occupational safety and health.*

### Learning outcomes by discipline

*1) To use the basic laws of natural science disciplines in professional activity.*
*2) Demonstrate knowledge of the theoretical and organizational and legal foundations of life safety.*
*3) Master the methods of rationalization of life activities aimed at reducing the anthropogenic impact on the natural environment and ensuring the safety of the individual and society.*

### Prerequisites

*School course*

### Postrequisites

*Doxologia The modern world of dangers Basics of protection from the dangers*

## Mathematics

| | |
|---|---|
| Discipline cycle | Basic disciplines |
| Course | 1 |
| Credits count | 5 |
| Knowledge control form | Examination |

### Short description of discipline
*The purpose of this course is to provide students with fundamental training in mathematics. The course is aimed at forming a sufficiently high culture of mathematical thinking among students and developing the ability to creatively approach problem solving. In addition to studying the fundamental foundations of higher mathematics (elements of analytical geometry, linear algebra, mathematical analysis, differential equations), the course assumes consideration of various applications of mathematics to solving production problems from the field of professional specialization.*
### Purpose of studying of the discipline
*creation of the basis for the development of logical thinking and mathematical culture. Formation of basic knowledge and acquisition of basic skills of using mathematical apparatus for solving theoretical and applied problems, as well as the necessary level of mathematical training for mastering other applied disciplines studied within a specific profile; skills of working with special mathematical literature*
### Learning Outcomes
*ON2 To use the basics of natural science knowledge of modern methods of physical and mathematical analysis and the las of chemistry to solve applied engineering problems.*
### Learning outcomes by discipline
*1) Selects methods of mathematical analysis and modeling, theoretical and experimental research of applied problems*
*2) Uses mathematical symbolism to express quantitative and qualitative relations of objects*
*3) Applies methods of visual graphical representation of research result*
### Prerequisites
*School course*
### Postrequisites
*Information and communication technology*

## Physics

| | |
|---|---|
| Discipline cycle | Basic disciplines |
| Course | 1 |
| Credits count | 3 |
| Knowledge control form | Examination |

### Short description of discipline
*In process of studying this discipline, students get acquainted with the basic laws, concepts of all sections of physics. Physics is an area of experimental science, performing laboratory work and tasks, students are convinced of unity of the theory and practice of experiments. Students have the opportunity to gain knowledge on the subject in any area of their specialty.*
### Purpose of studying of the discipline
*Formation of ideas about the role of experimental and theoretical methods of cognition of the surrounding world, development of skills for independent solving of physical problems, motivation to study modern scientific literature.*
### Learning Outcomes
*ON2 To use the basics of natural science knowledge of modern methods of physical and mathematical analysis and the las of chemistry to solve applied engineering problems.*
### Learning outcomes by discipline
*1) Assesses the degree of reliability of the results obtained using experimental research methods;*
*2) Uses various physical concepts, laws, theories in practice;*
*3) Applies knowledge of the basic laws of physics in solving professional problems.*
### Prerequisites
*School course*
### Postrequisites
*Theory of combustion and explosion*

## Natural disasters

| | |
|---|---|
| Discipline cycle | Basic disciplines |
| Course | 1 |
| Credits count | 5 |
| Knowledge control form | Examination |

### Short description of discipline
*The discipline is aimed at studying natural emergencies: earthquakes, volcanic eruptions, mudflows, landslides, avalanches, floods, tsunamis, hydrological hazards, hurricane, tornado, storm, squall, storm. The course covers: dangerous meteorological phenomena (heavy rain, large hail, cold, heat, drought), forest and steppe fires, epidemics, epizootics, epiphytoties, dangerous phenomena in space (meteorites, comets, asteroids).*
### Purpose of studying of the discipline
*Training of specialists in the field of public protection, prevention and liquidation of emergency situations, increasing the stability of economic facilities and life support of the population to work in the emergency system of the Republic of Kazakhstan.*
*Familiarization of students with the complex of negative impacts of natural origin, spontaneously or periodically occurring in the biosphere and technosphere.*
### Learning Outcomes
*ON3 To carry out professionally-oriented activities in the field of life safety and environmental protection.*
*ON4 To understand the essence and social significance of the profession, to put into practice the knowledge of world science in the field of occupational safety and health.*
### Learning outcomes by discipline
*1) Describe the features of the development of natural natural processes, their origin, repeatability, the nature of the flow, principles and methods of forecasting and prevention.*
*2) Apply the principles of preparation and execution of preventive, rescue and recovery operations in relation to natural emergencies of varying severity at the level of the region, district, city, enterprise.*

*3) Use the requirements of legislative and regulatory acts on the prevention and liquidation of emergency situations caused by natural disasters.*

### Prerequisites

*School course*

### Postrequisites

*Safety of vital functions*

## Educational practice

| | |
|---|---|
| Discipline cycle | Basic disciplines |
| Course | 1 |
| Credits count | 2 |
| Knowledge control form | Total mark on practice |

### Short description of discipline

*During the course of the training practice, the following issues are considered: safety in field and desk conditions; methods of computer modeling of field and desk observations using software (Microsoft Windows, Microsoft Excel); terrain; points of route climate control; sampling of water from the reservoir, determination of quality indicators and physico-chemical composition of water; composition and physical properties of the soil, mechanical and chemical composition.*

### Purpose of studying of the discipline

*Possess the skills of working with information in a computer network in the field of life safety and environmental protection and processing the results of experience by the method of mathematical statistics.*

### Learning Outcomes

*ON3 To carry out professionally-oriented activities in the field of life safety and environmental protection.*
*ON4 To understand the essence and social significance of the profession, to put into practice the knowledge of world science in the field of occupational safety and health.*

### Learning outcomes by discipline

*1) Possess in practice new professionally-oriented knowledge in the field of engineering and technology, striving for self-development, professional development and mastery.*
*2) Consider safety issues in the field and in-house conditions; methods of computer modeling of field and in-house observations using software (Microsoft Windows, Microsoft Excel).*
*3) To determine water and soil quality indicators based on the establishment of mechanical and physico-chemical compositions.*

### Prerequisites

*School course*

### Postrequisites

*Manufacturing Practice I*

## Safety of vital functions

| | |
|---|---|
| Discipline cycle | Basic disciplines |
| Course | 2 |
| Credits count | 5 |
| Knowledge control form | Examination |

### Short description of discipline

*The discipline is aimed at studying legislative acts, theoretical foundations in the field of life safety, the importance of republican civil protection services, their tasks. The course covers: hazards of the human habitat; classification of natural and man-made emergencies; principles of protection of the population in emergency situations; stability of the functioning of facilities; rescue operations in the affected area; elimination of the consequences of emergency situations.*

### Purpose of studying of the discipline

*Creating safe and harmless living conditions; designing new equipment and technological processes in accordance with modern requirements for the safety of their operation, taking into account the stability of the functioning of economic facilities and technical systems; forecasting and making competent decisions in emergency situations to protect the population and production personnel of economic facilities from the possible consequences of accidents, catastrophes, natural disasters and the use of modern means of destruction, as well as during the elimination of these consequences.*

### Learning Outcomes

*ON3 To carry out professionally-oriented activities in the field of life safety and environmental protection.*
*ON4 To understand the essence and social significance of the profession, to put into practice the knowledge of world science in the field of occupational safety and health.*

### Learning outcomes by discipline

*1) Master the basics of safe human interaction with the environment and the basics of protection from negative factors in dangerous situations.*
*2) Simulate and predict the development of emergencies, identify hazards, assess the negative impacts of the habitat.*
*3) Develop and implement measures to improve the safety of life and eliminate the negative consequences of dangerous and harmful factors.*

### Prerequisites

*Introduction to the profession*

### Postrequisites

*Rescue case Facilities in extreme conditions Building construction*

## World of Abai

| | |
|---|---|
| Discipline cycle | Basic disciplines |
| Course | 2 |
| Credits count | 3 |

| | |
|---|---|
| Knowledge control form | Examination |

### Short description of discipline
*The discipline is aimed at studying historical facts, the philosophical and artistic foundations of the works of Abay Kunanbaev, Shakarim Kudaiberdiev, which form worldview and aesthetic values, the student`s ability to express his opinion, practical skills and perception of such human qualities as morality, honesty, artistic character. The genius of the writers of Kazakh literature and the role of M. Auezov in the study and popularization of Abai`s heritage, the significance of his works for history, literature and science are determined.*

### Purpose of studying of the discipline
*Formation of the meaning of philosophical and ideological being, understanding of the problems raised in the works of Abai Kunanbayuly, Shakarim Kudaiberdiuly, Mukhtar Auezov and application of the acquired knowledge in the practice of everyday life.*

### Learning Outcomes
*ON1 Demonstrate socio-cultural, economic, legal, environmental knowledge, communication skills, apply information technologies taking into account current trends in the development of society.*

### Learning outcomes by discipline
*1) Analyzes the philosophical and artistic foundations of works, historical facts related to the creative heritage of Abai Kunanbayev, Shakarim Kudaiberdiyev, Mukhtar Auezov*
*2) Uses in practice the humanistic ideas of Abai`s philosophical and artistic works*
*3) Assesses the place and significance of Abai`s works in the history of literature and science*

### Prerequisites
*The module of socio-political knowledge (sociology, political science, cultural studies, psychology)*

### Postrequisites
*Basic and profile disciplines of the EP*

## Chemistry

| | |
|---|---|
| Discipline cycle | Basic disciplines |
| Course | 2 |
| Credits count | 5 |
| Knowledge control form | Examination |

### Short description of discipline
*The discipline is aimed at studying the basic concepts and laws of chemistry, classical and quantum-mechanical ideas about the structure of the atom and chemical bonds; consideration of periodic laws and structure of the periodic system of chemical elements, types of chemical bonds; mastering the laws of thermodynamics, chemical kinetics and chemical equilibrium, corrosion of metals, ways of expressing the concentration of solutions; promote the ability to apply the knowledge gained in practice, to solve problems in professional training.*

### Purpose of studying of the discipline
*Familiarization of students with modern ideas about the structure of substances, with the basic theories of chemical processes, with the properties of catalytic and complex systems, as well as with the properties of elements. Knowledge of the basic theory of chemical processes necessary in the study and deeper understanding of all subsequent special disciplines, also give students scientific and practical training in the basics of analytical chemistry.*

### Learning Outcomes
*ON2 To use the basics of natural science knowledge of modern methods of physical and mathematical analysis and the las of chemistry to solve applied engineering problems.*

### Learning outcomes by discipline
*- possess fundamental chemical concepts, theories, laws and patterns.*
*- describe the main methods of scientific knowledge used in chemistry, such as observation, description, measurement, experiments.*
*- be able to give quantitative estimates and make calculations using chemical formulas and equations.*

### Prerequisites
*School course*

### Postrequisites
*Environmental pollution*

## Environmental pollution

| | |
|---|---|
| Discipline cycle | Basic disciplines |
| Course | 2 |
| Credits count | 5 |
| Knowledge control form | Examination |

### Short description of discipline
*The discipline is aimed at studying the theoretical foundations of environmental protection, ensuring its quality, criteria for assessing the ecological state of the main subsystems of environmental protection by nature. The course deals with: pollution of the atmosphere, hydrosphere, lithosphere; energy pollution of the environment; protection of the atmosphere and hydrosphere from emissions and discharges of harmful substances; protection of the lithosphere from waste; protection of the environment from energy impacts.*

### Purpose of studying of the discipline
*Formation of students` knowledge on theoretical issues of pollution and environmental protection - the basics of technologies for cleaning dust and gas emissions, liquid discharges, solid waste disposal and processing, principles of environmental protection from energy impacts necessary for making environmentally oriented decisions in various spheres of the national economy and environmental management.*

### Learning Outcomes
*ON8 Analyze and regulate the radiation-chemical state of the working area and the environmen.*

### Learning outcomes by discipline
*1) Possess theoretical knowledge of the main sources of pollution and their impact on the components of the biosphere, methods of monitoring the state of the environment.*

*2) Classify and determine the type of pollution, propose control measures to eliminate or reduce the negative effects of pollution on the components of the biosphere and nature as a whole.*
*3) Formulate and justify conclusions on the problems of pollution and environmental protection.*

### Prerequisites

*Chemistry*

### Postrequisites

*Basics of marketing and management in environmental engineering  Innovative technologies to protect the environment Engineering ecology*

## Environmental management and geo-ecology

| | |
|---|---|
| Discipline cycle | Basic disciplines |
| Course | 2 |
| Credits count | 5 |
| Knowledge control form | Examination |

### Short description of discipline

*When studying the discipline, the following issues are considered: the purpose and objectives of the discipline; the earth as a planet, the structure of the Earth. Lithosphere, hydrosphere; geological aspects of water management; atmosphere: types of air masses, atmospheric circulation; landscape management; structure, functioning of geosystems; geology, hydrogeology. climatology, meteorology; theoretical and methodological foundations of geoecology; management of the ecological state of natural and anthropogenic geosystems; modern geoecological problems.*

### Purpose of studying of the discipline

*Study of the basic principles and laws of rational nature management, formation of ecological culture, preparation of students for solving modern problems of nature management and nature protection.*

### Learning Outcomes

*ON8 Analyze and regulate the radiation-chemical state of the working area and the environmen.*

### Learning outcomes by discipline

*1) Understand the theoretical and methodological foundations of geoecology, management of the ecological state of natural and anthropogenic geosystems.*
*2) Explain the issues of landscape studies, the functioning of geosystems, as well as man-made climate change and its consequences.*
*3) To assess the regional geoecological state of natural and technical geosystems*

### Prerequisites

*Natural  disasters*

### Postrequisites

*Environmental safety of Kazakhstan Ecological safety of the environment Ecology of Kazakhstan*

## Manufacturing Practice I

| | |
|---|---|
| Discipline cycle | Basic disciplines |
| Course | 2 |
| Credits count | 5 |
| Knowledge control form | Total mark on practice |

### Short description of discipline

*The practice includes the study of the following issues: regulatory and legislative acts and constituent documents regulating the organizational and legal status of the enterprise- organization as a business entity; the structure of the enterprise, the nature of its activities as a source of negative impact on the environment; equipping the enterprise with modern equipment and applied technological processes; the state of the enterprise- institution corresponds to safety; analysis and development of industrial safety measures in emergency situations of natural and man-made nature.*

### Purpose of studying of the discipline

*Independently determine the tasks of professional and personal development, engage in self- education, consciously plan advanced training in the field of industrial- safe activities. It applies in practice industrial- safe methods, measures and means that exclude the impact on workers and the environment of hazardous and harmful production factors and industrial pollution*

### Learning Outcomes

*ON5  Apply in practice industrially safe methods and means that exclude the impact of hazardous and harmful production factors and industrial pollution.*
*ON6 Possess basic knowledge and practical training in the field of technical sciences for the analysis and examination of the activities of the studied objects to safety requirements.*

### Learning outcomes by discipline

*1) Independently determine the tasks of professional and personal development.*
*2) Plan professional development in the field of industrial-safe activities.*
*3) Analyze the conditions of the production environment taking into account the physiology of labor and sanitary standards of enterprise design.*

### Prerequisites

*Safety of vital functions*

### Postrequisites

*Manufacturing Practice II*

## Manufacturing Practice II

| | |
|---|---|
| Discipline cycle | Basic disciplines |
| Course | 3 |
| Credits count | 5 |

| | |
|---|---|
| Knowledge control form | Total mark on practice |

### Short description of discipline
*The practice is focused on the study of general information about an industrial facility, its organizational structure, functioning features, performance indicators, safety measures. The following issues are considered: information about injuries; professional training of personnel; safety analysis of the facility; technology and technological equipment; characteristics of hazardous substances; technical solutions for safety; characteristics of safety control points; readiness of the facility for localization and emergency response; a list of regulatory documents regulating safety requirements.*

### Purpose of studying of the discipline
*Introduction of experience and skills in organizational, technical and administrative management in production and familiarization with production technology.*

### Learning Outcomes
*ON7 Assess the impact of engineering and technical complexes and technological equipment on safety conditions.*

### Learning outcomes by discipline
*1) Possess information about an industrial facility, its organizational structure, functioning features, performance indicators and security measures.*
*2) Analyze the safety conditions of the facility on the basis of legislative and regulatory documents.*
*3) Characterize the effect of hazardous substances, technical solutions for safety, the operation of control points, the readiness of the facility for localization and emergency response.*

### Prerequisites
*Manufacturing Practice I*

### Postrequisites
*Production practice III*

## Physiology and psychology of work

| | |
|---|---|
| Discipline cycle | Basic disciplines |
| Course | 3 |
| Credits count | 5 |
| Knowledge control form | Examination |

### Short description of discipline
*The discipline is devoted to the laws of physiological changes of the human body in the process of work, professionally important mental qualities of a person in various fields of activity, the ability of people to work under the influence of industrial and social factors, the causes and criteria for the success of professional activity, occupational safety psychology. The following issues are considered: the role of psychophysiological factors, the physiology of the central nervous system; the severity and intensity of labor; methods and means of labor psychology; organizational development of the labor collective.*

### Purpose of studying of the discipline
*The disclosure of the theoretical and methodological foundations of the problem of professional formation of a person in the process of work, the formation of future specialists in social work of a systemic view of work and its impact on a person, as well as the formation of initial skills of reflection on their own future work.*

### Learning Outcomes
*ON3 To carry out professionally-oriented activities in the field of life safety and environmental protection.*
*ON4 To understand the essence and social significance of the profession, to put into practice the knowledge of world science in the field of occupational safety and health.*

### Learning outcomes by discipline
*1) Describe the physiological changes of the human body in the process of work.*
*2) Explain the psychophysiological factors and physiology of the central nervous system.*
*3) Organize the development of the workforce, taking into account the severity and intensity of work.*

### Prerequisites
*Physical factors in the workplace Industrial Ventilation Production sanitation*

### Postrequisites
*Occupational Safety and Health*

## Occupational Safety and Health

| | |
|---|---|
| Discipline cycle | Profiling discipline |
| Course | 4 |
| Credits count | 6 |
| Knowledge control form | Examination |

### Short description of discipline
*The discipline is aimed at studying the management system and the organizational and legal foundations of labor protection, the state of occupational injuries and occupational diseases. The course covers: industrial sanitation and occupational hygiene; certification of workplaces according to working conditions; harmful substances in the air of the working area; dust; lighting; microclimate; noise and vibration; ionizing radiation; intensity and severity of work; classification of protective equipment; safety; fire and electrical safety*

### Purpose of studying of the discipline
*Eliminate the impact of dangerous and harmful production factors on humans, ensure the safety of the production process and production equipment, optimize labor processes and the production environment.*

### Learning Outcomes
*ON10 Apply in practice the knowledge of the basics of conducting production processes from the possible consequences of emergencies, accidents and catastrophes.*
*ON11 Analyze, evaluate and make decisions on the problems of the current state of life safety, based on the achievements of science and practice of domestic and foreign experience*

### Learning outcomes by discipline

*1) Possess the basic provisions of legislative and regulatory acts in the field of labor protection and safety, demonstrate knowledge of the organization of state supervision and public control over labor protection, the labor protection management system in the organization, the procedure for certification of workplaces.*
*2) To organize work on labor protection at the production site and the enterprise as a whole, to monitor compliance with safety rules, to check the serviceability of technical means of protection; to teach safe techniques and methods of work of workers.*
*3) Solve the tasks of ensuring healthy and safe working conditions, analyze working conditions, causes of injuries and occupational diseases, take measures to protect people in the field of labor protection.*

### Prerequisites
*Physical factors in the workplace Industrial Ventilation Production sanitation*

### Postrequisites
*Final examination*

## Industrial toxicology

| | |
|---|---|
| Discipline cycle | Profiling discipline |
| Course | 4 |
| Credits count | 5 |
| Knowledge control form | Examination |

### Short description of discipline
*The study of the discipline is aimed at studying the basic concepts, directions and terminology of industrial toxicology. The following issues are considered: parameters and basic laws of toxicometry; fundamentals of sanitary and hygienic rationing; specifics and mechanism of toxic effect of harmful substances; toxicokinetics; possible effects of industrial poisons; basic theoretical and practical aspects of individual toxicology; antidotes. long-term effects of the poison on the human body.*

### Purpose of studying of the discipline
*The ability to identify toxic substances, to know the characteristics and properties of toxic substances, their impact on the environment and the living organism.*

### Learning Outcomes
*ON8 Analyze and regulate the radiation-chemical state of the working area and the environmen.*

### Learning outcomes by discipline
*1) Consider the theoretical and methodological foundations of toxicometry.*
*2) Explain the mechanism of toxic effect of harmful substances, sanitary and hygienic rationing.*
*3) To assess the technogenic toxic effects of xenobiotics on the environment and humans.*

### Prerequisites
*Recovery, recycling and disposal of consumer waste Disposal, disposal and disposal of industrial waste Recovery technology and recycling of waste production and consumption*

### Postrequisites
*Final examination*

## Technical regulation of industrial safety

| | |
|---|---|
| Discipline cycle | Profiling discipline |
| Course | 4 |
| Credits count | 5 |
| Knowledge control form | Examination |

### Short description of discipline
*The discipline is aimed at studying the legal, economic and social foundations of industrial safety, the content of the Law of the Republic of Kazakhstan «On Technical Regulation», the basic principles and mechanisms of technical regulation. The course deals with: the unity and binding nature of the requirements of technical regulations; requirements for the formation of an infrastructure for confirming compliance in the field of technical regulation; safety requirements for handling vehicles, pressure vessels, hot water and steam boilers, operation of process pipelines.*

### Purpose of studying of the discipline
*Acquisition and assimilation by students of knowledge in the field of legislation on technical regulation in the Republic of Kazakhstan, approaches to the development of general and sectoral technical regulations, republican standards and standards of organizations, interaction of enterprises with public authorities.*

### Learning Outcomes
*ON10 Apply in practice the knowledge of the basics of conducting production processes from the possible consequences of emergencies, accidents and catastrophes.*
*ON11 Analyze, evaluate and make decisions on the problems of the current state of life safety, based on the achievements of science and practice of domestic and foreign experience*

### Learning outcomes by discipline
*1) Possess regulatory and methodological support for technical regulation.*
*2) Apply methods and principles of technical regulation in professional activity.*
*3) Demonstrate skills in confirming compliance of technical regulation objects with the established requirements.*

### Prerequisites
*Safety engineering and technology Safety of technological processes and equipment  Ergonomics of production processes*

### Postrequisites
*Final examination*